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An Extended Cinematic Design Process based on
Architectural Interpretations of Narrative Film
(映画から建築へ：物語映画の建築的解釈に基づく設計プロセスの展開)

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Doctoral Dissertation
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CHAPTER 1

INTRODUCTION

1.1. BACKGROUND

Constant self-referentiality in a discipline such as architecture may push it towards its demise or the very least towards bland and over-used repetitions. Therefore throughout the ages, architects have searched for new hunting grounds for inspiration on the aesthetic, conceptual, philosophical, technical, etc. levels in as many other disciplines and phenomena as possible¹.

Contemporary architecture, we feel, seems to be limited with purely economic, utilitarian, technical, technological and superficial aesthetic concerns. With the current trends of “Starchitect” designed architectural objects, the latter are becoming more and more mass-consumed branded products; and the increasing demand of only a selected few designers powered by the role of mass-media in the promotion of stardom and the distribution of image, the quality of work of these practitioners has decreased and become more repetitive. And since “Starchitects” are the trendsetters of the discipline, their actions set a snowball effect on the quality of their followers’ works.

In parallel, there are some other more positive orientations in the architectural discipline, orientations resulting from the recent global environmental concerns, giving birth to more conscientious practitioners taking into consideration the well-being of their ecosystems and future generations. Unfortunately, the general result of this particular diligence is the production of bland, rationally utilitarian architectures.

On the other hand, Narrative Film as an artistic product is to this day and age one of the most powerful means to stimulate imagination, feelings and deep contemplations in its users (i.e. viewers). Although some architects have already used and are still using film as a conceptual inspiration source for their designs, their approaches remain more intuitive than pragmatic.

So, why not learn what makes Narrative Film so appealing and powerfully charged on many levels, and apply the findings to architectural conception in order to be able to produce objects and spaces richer than what is currently offered?

1.2. OBJECTIVES

In this research then, we deepen the understanding of film on all its levels of significance in order to have a better manipulation of its elements. By doing so, we can develop and present a design process that would offer architects interested in film the ability to design architectures

¹ Some examples would be DeStijl, Futurism, Art Deco, Deconstructivism, and Parametric Architecture, to name but a few.

more loyal in form and significance to their filmic source of inspiration. Most importantly, architects using our process would be able to complement their designs with additional substantial and formal layers to their creations, resulting in objects having multiple readings, becoming more attractive and appealing to their users.

We coin our process as *Extended Cinematics*: a design process that assists designers into generating spaces that reproduce or transform to certain extents the unique qualities of a single film, a whole corpus of films, or some selected significant filmic elements (segments, shots, etc.), into reality and architecture, and add new substantial, formal, narrative, iconic, semantic, perceptual, and other dimensions to their designs.

The definitions of the adjective “cinematic” can be loosely summarized as: having qualities characteristic of motion pictures in general, and film in particular. As our ultimate goal is the transformation of films into architecture giving it “filmic” qualities, the word “cinematic” thus responds appropriately to our objectives. And since this conceptual transformation of films into architecture would naturally denote a transmutation of their properties into reality, the term “extended” comes into light: to transform and transmute the qualities characteristic of motion pictures is in a way to expand in scope, effect, or meaning, i.e. “extend” them into reality and architecture. Accordingly to these definitions and our objectives, the concept of *Extended Cinematics* was conceived.

We have coined our architectural design process as *Extended Cinematics* then, because we aim it to become an open and ever-evolving procedure that facilitates a designer’s task of projecting, reproducing, even more, *Extending* into reality most of the relevant dimensions and properties of, relating to, or characteristic of cinema, as an art discipline and industry (*Cinematics*), in general, and Narrative Film, in particular.

1.3. RELATED RESEARCH

Architects and architectural theorists have always taken cinema and film theories deeply into consideration, since both art disciplines deal with time and space in many similar ways. “In many schools of architecture around the world, the most recent interest is cinema. Films are studied for the purpose of discovering a more subtle and responsive architecture. Also some of the most esteemed representatives of the architectural avant-garde of today, like Bernard

Tschumi, Rem Koolhaas, Coop Himmelb(l)au and Jean Nouvel have admitted the significance of cinema in the formation of their approach to architecture.”²

However, the works of these architects address almost exclusively the cinematographic process itself referring to 1) cinema while using windows and openings “framing” a view of a landscape, street, etc., and/or juxtaposing different functional or qualitative spaces in linear series, “sequences”, 2) montage theories such as those of Eisenstein³ for example, while using a collage of different materials or architectonic elements⁴ producing a somewhat homogenous objects or spaces⁵, and 3) the filmmaking process by comparing architects to filmmakers, and vice versa⁶.

As for urban planners, designers and theorists, they often refer to films as offering the best representations and experiences (outside of being actually physically present in the urban context) of cities⁷ and acting as essential references and recordings of collective memories and imageries⁸.

Architecture is also a central subject in the study and conception of set designs, although its filmic purposes are in complete opposition of real life architectonic functionality⁹.

Last but not least, we cannot speak of architecture/cinema relations without referring to the actual production of the cinema theater itself¹⁰, which are more of utilitarian constructs aiming to fulfill the specific functions of accommodating the projections halls and their amenities.

² Juhani Pallasmaa, *The Architecture of Image: Existential Space in Cinema*, Rakennustieto Publishing, 2007.

³ Eisenstein, Sergei M., “Montage and Architecture”, *Assemblage*, No. 10 (1989): pp. 111-131.

⁴ “Take the IMA (*Institut du Monde Arabe*), for instance, for me this was a design based entirely on the idea of movement forward. As far as the 'editing' of the textures is concerned, if it isn't film, it is in any case video. In this respect architecture stands at the crossroads of a whole variety of influences.” A declaration by Jean Nouvel in an interview given to Ole Bouman and Romer van Toorn (Roemer van Toorn, and Ole Bouman, Ed., *The Invisible in Architecture*, Academy Editions & Ernst and Sohn, 1994, p. 322).

⁵ The best illustrations for this are the theories of Bernard Tschumi, which were manifested in the form of his winning entry to the Parc La Villette competition in Paris (won in 1982-1983, and completed in 1987). He goes in details of his processes and theories in his 2 books: *The Manhattan Transcripts* (John Wiley & Sons, 1994) and *Architecture and Disjunction* (The MIT Press, 1996).

⁶ “An architect, like a film-maker, should know how to take the correct distance, to survey the whole and be able to analyze the details.” Jean Nouvel in *The Invisible in Architecture*, p. 314.

⁷ Alan Marcus and Dietrich Neumann, Ed., *Visualizing the City*, Routledge, 2008.

⁸ Innumerable essays, books, theories and academic papers exist on this subject, we mention but a few: *Projected Cities* (Stephen Barber, 2002), *Visualizing the City* (Alan Marcus and Dietrich Neumann, ed., 2008), *A Critical Study on Tokyo: Relations Between Cinema, Architecture, and Memory, A Cinematic Cartography* (Salvator-John A. Liotta, 2007).

⁹ Dietrich Neumann, Ed., *Film Architecture: From Metropolis to Blade Runner*, Prestel Publishing, 1999.

¹⁰ Out of the Innumerable examples that exist all around the world and in almost every urban center, we point out one of the most famous examples of Coop Himmelb(l)au's UFA-Cinema Center in Dresden (completed in 1998).

In *The Architecture of Image: Existential Space in Cinema*¹¹, architect Juhani Pallasmaa analyzes different films from a phenomenological approach, and sheds light on their corresponding filmmakers' use of architectural imagery in evoking and maintaining specific mental states. He does so in order to "re-sensitize" the architectural profession to the inherent poetics of architecture. The similarities of our own study and Pallasmaa's book stop at the idea of using film as the basis of our "re-sensitization" (although he uses additional references in other art disciplines) and that architecture has to find again a higher meaning and purpose other than being a visually attractive functioning machine. Pallasmaa's purpose consists mainly of an awareness process towards the rational and emotionless contemporary architecture.

Last but not least, we, ourselves, have previously worked on the subject treated here as our graduation project from architecture school, a little over three years ago in our country of origin¹². Still, the treatment then was extremely underdeveloped and on many levels very intuitive. This was due to the lack of appropriate theoretical guidance and academic support. Our short thesis back then, focused exclusively on understanding and defining space in film¹³; and as a design project, we had chosen David Lynch's *Lost Highway* as a case-study film to reinterpret (loosely based on the findings in the thesis) into an architectural object (a house).

Our current dissertation focuses more on film semiotics and its Structuralist Semio-Linguistic analyses rather the architectural ones, because as our target audience is architects, we assume that they are already fully aware of and manipulate the tools of architectural conception/design language and semiotics, if not on the conscious structural level, then at least on the intuitive one. On the other hand, to grasp film semiotics and fully comprehend the design potentials of film components is not as obvious as that. Herein comes our role as mediators, and the originality of our work:

- First of all we define film semiotics in a concise and accessible way focusing on the components that we believe have more design potentials than others (this initial hypothesis is put to test and acknowledged in Chapter 6),
- then by displaying the analogies of film components with architectonic ones (based on thorough analyses conducted in Chapters 4 and 5), we prompt architects to perceive them as more of spatial/structural entities full of conceptual potentials;

¹¹ Pallasmaa, 2007.

¹² At the Holy Spirit University of Kaslik, Jounieh, Lebanon.

¹³ Largely and loosely based on: André Gardies, *L'Espace au Cinéma*, Meridiens Klincksieck, 1993.

- and we ultimately offer the designers a referential Diagram for design derivation and architectural interpretations, which they can also manipulate to analyze films, extract the appropriate components, and extend them in their final concepts/designs.

And so, contrary to all of the references and examples mentioned above, we do not stick to theoretical aspects of film-architecture relations, but develop an actual Design Process of Film to Architecture Transformation, based on our newly formulated Film-Architecture Analogy Derivation Diagram, which is itself derived from our systematic approach to film using Structuralist Semio-Linguistics.

Finally, we consider that the action of submitting a film directly to an architectural interpretation (as done in our graduation project mentioned above) as purely intuitive (Figure 1.1), whereas in our current dissertation, we tackle the subject at hand in a more semiotic, rational and structuralist way. *Extended Cinematics* becomes then an intermediary between Narrative Film and Architectural Design: a sort of a tool used by Architectural Designers to analyze Narrative Film, extract its Film Specific Components, give them architectural interpretations, and finally use them as architectural concepts to generate multiple new architectures (Figure 1.2).



Figure 1.1 Intuitive Process of Film to Architecture Transformation

Inspired by narrative film, architects design architectures solely based on personal intuition.

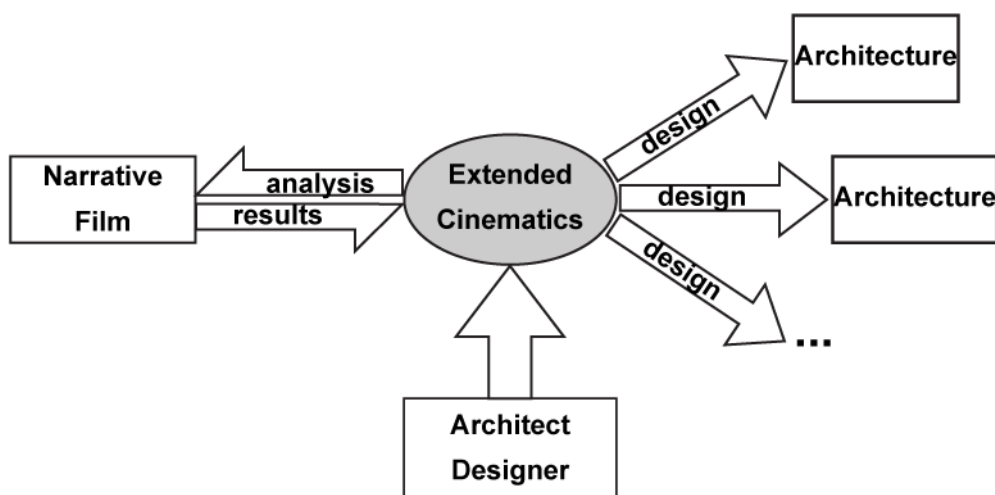


Figure 1.2 Extended Cinematics Process of Film to Architecture Transformation

Architects based on *Extended Cinematics* can analyze one or more narrative films, extract the film specific components, give them architectural interpretations, and use them as architectural concepts to generate multiple new architectures.

1.4. DISSERTATION STRUCTURE

This dissertation is structured in 3 main Chapter sections:

- A Theoretical Section: Chapter 2 and Chapter 3
- An Analytical Section: Chapter 4 and Chapter 5
- An Experimental Section: Chapter 6

In Chapter 2, we first clarify the semantic differences between *Film*, *Cinema* and *Movie*, by focusing on the central object of our study, Narrative Film, and then, we define the approach we adopt in our analytical works, which is a Structuralist Semio-Linguistics to film analysis.

In Chapter 3, based on the approach above, we elaborate on the Architectonics of Narrative Film (the artistic structure of film) and list its Components, namely: Narrative (Fabula + Plot + Events), Diegesis (and its Existents), Syntagmas (including Shots), Segments, and the Optical Devices.

Having established the theoretical basis of our research, we apply its logic in Chapters 4 and 5 in the analytical processes conducted on 2 case study films, *Russian Ark*, and *Short Cuts* (respectively), as a means to learn of the analogies that exist between Narrative Film and Architecture, and develop a preliminary analogy model that structures them.

Also in Chapters 4 and 5, and as a starting point for “film to architecture” transformation studies, we conduct semiotic analyses on 2 already existing buildings (Yokohama *Osanbashi*, in Chapter 4, and Kitakami *Sakura Hall*, in Chapter 5) and compare the results with those of the analyzed films: these comparative analyses are carried out in order to determine the architectural interpretational and design potentials that could be developed from the extracted Film Specific Properties of the case study films.

Last but not least, in Chapter 6, we conduct a “film to architecture transformation” design experiment, the *Extended Cinematics Workshop*, with 5th and 6th year architecture students from Lebanon, as means to 1) study the feasibility of architectural design based on the deeper structures of Narrative Film, 2) survey the variety of designs that can be derived from a single initial film, and if the similarities between them can be traced back to the latter, 3) survey the differences that distinct 2 designs that have the same design topic but are derived from 2 different films, and if the differences can be traced back to the differential films, 4) survey the Film Components that stimulate the largest number of either architectural interpretations, or architectural conceptual/design generation in designers, 5) further develop the preliminary Film-Architecture analogy in order to render it into a more advanced and reliable referential

model for designers, and finally, 6) look at, examine, and evolve the whole process itself, starting from the analytical phases, passing through the interpretational phases, and finishing in the final design phases (where the chosen film and/or its Components are *Extended* into architecture), by conserving and promoting its strong points and adjusting, improving and, if needed even eliminate some of its weaker points.

Finally, since this thesis contains many abbreviations, technical words, and newly introduced theme-specific terms, we list all of their corresponding definitions in alphabetical order in an easily accessible Glossary at the end of the dissertation.

CHAPTER 2

FILM SEMIOTICS

2.1. WHAT IS FILM?

A common question we faced while working on our research and trying to explain to others the contents of work was “What is the difference between film, movie, and cinema?”

At first, this sounded a bit confusing for us that people couldn’t see the obvious difference between these 3 terms, and so, taking the affair more lightly, our answers were quick and escapist in order for us to focus on the more “important” details of our work such as our use of semio-linguistics, our analytical and experimental works, and the deeper meanings of our process.

Yet with a little distance on the subject at hand, one might start wondering that if an answer to a question is so obvious, then why is it recurrent? And this time with much reluctance we finally apprehend the reason behind this recurrence: they cannot see the difference because they simply don’t know! Or to be more specific, people who are not involved enough in film theory and culture cannot make the distinction between “film”, “movie” and “cinema” because they were not told about it.

It is true that in our current culture of multimedia dominance, with the omnipresence of video¹ and its ease of distribution to the public, a distinction between the above 3 terms might be confusing. Why should there be a distinction between 3 terms that refer to the same concept of “motion pictures” or “moving images” in the first place? People go to the *cinema* or rent a DVD to watch a *movie*, and go online to stream and watch a video. And what about “film”?

Gerald Mast in *Film/Cinema/Movie: A Theory of Experience*² focuses early on in his book on the disambiguation of the 3 terms. He points out that “movie” is an Americanism, a slang used in the early days of Hollywood as an abbreviated form of “moving pictures”³. Since it was originated in Hollywood, the heartland and birthplace of the big budget entertainment industries, the word “movie” has more fun, enjoyable, easy, amusing, etc. connotations attached to it. *Movies* act more as diversions and escapades from daily lives, as they emotionally stimulate their audiences and capture their attention for brief amounts of time by means of great audio-visual “wizardries”. *Movies* are rarely the center of deep intellectual discussions.

¹ Our term “video” is meant to represent and encompass any and all presentation formats that involve moving pictures, such as films, movies, documentaries, animations, television shows, commercials, etc.

² Gerald Mast, *Film/Cinema/Movie: A Theory of Experience*, The University of Chicago, 1983, p. 8.

³ Ibid.

Film on the other hand, as Mast elucidates, has higher intellectual connotations attached to it⁴. Contrary to *movies*, watching a *film* is not necessarily an entertaining experience; it is however (theoretically of course) a thought provoking, and culturally enriching one. Cinematographic works outside the circle of influence of Hollywood, or Bollywood, for that matter, are considered to be more as *films* than *movies* since the purpose of their production is not necessarily solely an entertaining and economic one: *filmmakers*⁵ have relatively more freedom over their works as they are not constrained by big budgetary demands from their producers/production studios, i.e. investors. This relative financial freedom in *film* production is often interpreted as an artistic freedom of expression, which doesn't always necessarily entail amusement from audiences experiencing it. Consequently, *films* have usually more of a niche audience distribution contrary to *movies* aimed at appealing and pleasing an as large as possible market base.

Cinema is "far more genteel and classier than previous both" according to Mast, and it can be considered as having a "more generic meaning appearing as a plural and standing for a whole class of works."

A more precise distinction between the 3 would have us going into their actual denotative definitions and differences:

1. **Film** is the actual physical material, the celluloid strip on which moving pictures are recorded. The use of *film* is not limited to cinematography, as it existed much earlier with the advent of still photography. The latter is primarily a spatial art form since it captures 3-dimensional life and converts it into 2-dimensional plane surface. Referring to Siegfried Kracauer⁶, Gerald Mast asserts "the strength of the *filmic* approach is its attention to space. Its inevitable weaknesses are the handling of time and of sound" because the characteristics of motion pictures are "inevitably *filmic*, i.e. photographic", and "to speak of a motion picture's *filmic* qualities is to speak of its spatiality and its compositional values"⁷.
2. The term **Cinema** is derived from the French "Cinématographe", an invention by the Lumière brothers in 1885 that included 3 functions in one machine: a motion-picture capturing camera, a film processing (printing) unit, and a (film) projector. By adding movement to photography, the Time dimension becomes an intrinsic property of *cinema*.

⁴ Mast, p. 8.

⁵ We write *filmmakers* with italics as a more specific designation of "makers of film" distinguishing it from "film-makers" and "movie-makers", general designations that also encompass "those who make movies".

⁶ Siegfried Kracauer, *Theory of Film: the Redemption of Physical Reality*, Oxford University Press, 1960.

⁷ Mast, pp. 8-9.

Therefore, *cinema* adds new layers of complexity, such as continuity (of movement and sound) and succession (of frames and events) to *film* spatiality.

3. **Movie** is “a specific kind of Cinématographe recording. It differs from the general process of Cinématographe recording in that it usually fulfills a conventionalized length (2 hours, plus or minus 20 minutes); it uses elements borrowed from narrative forms (a plot with a beginning, middle, and end that is “an imitation of a human action”; character; cause-and-effect motivation; and so forth); it is manufactured and marketed within a commercial structure that has been specifically developed for producing it (the system of financing, distributing, and exhibiting movies); and it serves a specific audience function. (...) The key distinction between cinema and movie, then, is the former is a process and the latter a *form* that shapes the process.”⁸

“*Movies* are a specific form of *cinema*. Others could be defined in lengths other than 2 hours (+or-), structural assumptions other than narrative, different commercial bases, and different audience relationships. *Cinema* is a specific kind of recording on film (others would be variations on still, or single-frame, photography). And *film* is the most general term that contains the other two. The 3 terms reflect the fact that a motion picture is a material (film), process (cinema), and form (movie).”⁹

Gerald Mast ends the disambiguation of the 3 terms by giving a parallel with the literary arts, as its material can be either writing (written communication) or sound (oral communication). The semiotic process of literature is then linguistic, and it is expressed in such forms as novels, short stories, drama, comedy, tragedy, narrative, etc. And to quote him one last time on this subject:

“To ask, What is oral communication? is obviously a very different question from asking, What is language? or What is a novel? When asking, What is cinema? These different kinds of questions have been less obvious. All books are not novels, but all novels are books (which is why novels need not be called printies, but some films can still be called movies).”¹⁰

Thus a *film* (or a *movie*) is to *cinema* what a novel (or a book) is to literature.

Finally, the definitions above do not give a proper definition to the *filmic* (or even *movie*) phenomenon yet; what they do however is clarify the etymological difference between

⁸ Mast, p. 13.

⁹ Ibid., pp. 14-15.

¹⁰ Ibid., pp. 15.

film/movie/cinema synonyms. In order to define *film* more properly we make use of Roger Odin's definitions that describe best the category of films we focus our research on.

According to Odin¹¹, the phenomenon known as "film" encompasses the following 4 properties (the emphasis here is more on the visual properties than the auditory):

1. **"Real", (Non)Figurative Images:** as opposed to "mental" images, a film should "show" its viewers images (from the most iconic to the most abstract) that are perceived physiologically by the eye.
2. **Multiplicity:** a film is made of multiple images or frames, put together to form a second of film or movement. The 3 current and principal frame standards in movie-making business are: 24 FPS, 25 FPS, and 30 FPS¹² (although the most common is still the 24).
3. **Temporality:** film should depict in one way or another the passage of time in its discourse (a film should have a clear beginning and an ending disregarding its narrative contents' development¹³) and its contents (movement, transformation, progression).
4. **Projection:** a film should be projected on a screen as opposed to the other ways of viewing real, multiple, temporal images, such as the *Phenakisticopes*, *Praxinoscopes*, *Flip-books*, and *Zootropes*. Due to the current cross-platform formats of films (DVD, Blue-ray Disc, etc.), the concept of "screen" includes the screens of home-entertainment systems, i.e. TV, PC, and home projectors.

2.2. STRUCTURALIST SEMIO-LINGUISTIC APPROACHES TO FILM

2.2.1. GENERALITIES

"Structuralism is fundamentally a way of thinking about the world which is predominantly concerned with the perception and description of structures (...). A wholly objective perception of individual entities is therefore not possible: any observer is bound to create something of

¹¹ Roger Odin, *Cinema et Production de Sens*, Armand Colin, 1990.

¹² FPS: Frames per Second.

¹³ In many films the actual "projection time" would end while their narrative has not been completely solved yet, for example: the ending occurring sort of mid-action (*Lost Highway*, David Lynch 1997); or some sort of hint would be offered leaving the door open for spectator speculations (*Abre Los Ojos*, Alejandro Amenábar, 1997); or the ending of the narrative would be extremely vague leaving room for much imagination (*Persona*, Ingmar Bergman, 1966); or the narrative would be built in such manner that a perpetual cycle or iteration of the events depicted in the film seem inescapable (*Memento*, Christopher Nolan, 2000), etc.

what he observes. Accordingly, the *relationship* between observer and observed achieves a kind of primacy. It becomes the only thing that *can* be observed.” Terence Hawkes¹⁴

We start off this section with our dissertation’s opening quote as an emphasis on the practical obsolescence of the notion of objectivity in general, and in film analysis in particular. As much as analysts try to be objective in their mode of work and data extraction, it is enough that they choose one analytical method over another that the so-called universal objectivity is lost.

We emphasize on the non-objectivity of analytical methods as a way of asserting that *there are other ways of approaching film*, and **Structuralist Semio-Linguistics (SSL)** may not be the best way to analyze films either. However, our choice of a SSL approach to narrative film analysis is undoubtedly influenced by the inescapable fact that we are architects developing a design process for other architects. And in order to convey our process in the easiest yet deepest and most relevant way, we judged that the familiar discourse and logic of SSL (to architects) to be the most appropriate.

SSL describes and clarifies how the filmic medium functions and how it proceeds to create meanings. Moreover, the growth of semiotic theory and the presence of its vocabulary in a variety of intellectual fields confirm the importance of the science of signs, sign systems and signifying practices. Semiotics can be used as a tool then, for addressing the semantic riches of extremely diverse cultural forms, and its cross-disciplinary properties constitute a solution to the fragmentation and compartmentalization of intellectual disciplines; therefore we believe that SSL play a bridging role between film and architecture in the search for their similarities.

It is neither our task nor in our capabilities to go in the developmental and historical details of SSL, but it is, on the other hand, important to introduce this approach’s notions that are pertinent to our process.

As its name indicates, a central notion to SSL is that of **Structure**, and one the most important definitions of the latter is provided by Jean Piaget¹⁵ who argues that it can be perceived in an arrangement of entities which embodies the following fundamental ideas:

1. **Wholeness:** an arrangement of entities being complete in itself, with a sense of internal coherence. The components of this arrangement cannot exist outside of it, and they are held together by means of intrinsic laws that regulate their correlations as well as providing them properties that do not exist, or stop being valid outside the larger structure.

¹⁴ Terence Hawkes, *Structuralism and Semiotics*, Routledge, 2003.

¹⁵ Jean Piaget, *Structuralism*, Routledge & Kegan Paul PLC, 1971.

2. **Transformation:** the structure is not static because the laws that regulate it act in such a way that they not only *structure* it, but also make it *structuring*. "(...) The structure must be capable of *transformational* procedures, whereby new material is constantly processed by and through it. So language, a basic human structure, is capable of transforming various fundamental sentences into the widest variety of new utterances while retaining these within its own particular structure."¹⁶
3. **Self-regulation:** a structure is an autonomous system in a way that it doesn't need to refer to other systems in order to validate its transformational procedures. The transformations maintain and support the intrinsic laws that regulate the structure by rendering it a closed independent system in itself.

Structuralism as a way of perceiving phenomena, was first conceived by the Swiss Ferdinand de Saussure, yet without naming it as such. It was his approach to signs and linguistics, what he designated as **Semiology**¹⁷, which paved the way to structuralist thought in Europe in the 1960's. In parallel, on the other side of the Atlantic, in the USA, and around the same period of time (end of 19th century), Charles Sanders Peirce¹⁸ had also adopted a radical approach to signs and linguistics calling it **Semiotics**¹⁹.

Based on his studies on linguistics, Saussure elaborated a sign's properties of a relationship between its dual aspects of **Signified** and **Signifier**, or a "concept" and a "sound-image" in spoken language; and since the latter is fundamentally an auditory system, the relationship between the *signifier* and *signified* takes place in a temporally sequential manner²⁰.

¹⁶ Hawkes, p. 5-6.

¹⁷ "A science that studies the life of signs within society is conceivable; it would be a part of social psychology and consequently of general psychology; I shall call *semiology* (from the Greek *sēmeîon* 'sign'). Semiology would show what constitutes signs, what laws govern them. Since the science does not exist yet, no one can say what it would be; but it has a right to existence, a place staked out in advance. Linguistics is only a part of the general science of semiology; the laws discovered by semiology will be applicable to linguistics, and the latter will circumscribe a well-defined area within the mass of anthropological facts." Ferdinand de Saussure, *Course in General Linguistics*, p.16.

¹⁸ "Logic, in its general sense, is, as I believe I have shown, only another name for *semiotic*, the quasi-necessary, or formal doctrine of signs. By describing the doctrine as 'quasi-necessary', or formal, I mean that we observe the characters of such signs as we know, and from such an observation, by process which I will not object to naming Abstraction, we are led to statements, eminently fallible, and therefore in one sense by no means necessary, as to what *must* be the characters of all signs used by a 'scientific' intelligence, that is to say by an intelligence capable of learning by experience." Charles Sanders Peirce, *Collected Papers*, Vol. 2, Para. 227.

¹⁹ Semiology and Semiotics are actually the one and the same discipline; the Europeans however tend to use the first nomenclature, whereas the Americans and English speakers prefer the second.

²⁰ Contrary to paintings for example, where all the information needed to understand the relayed message exists at the same time, in a simultaneous manner.

This above sequentiality being an omnipresent and highly indispensable factor in cinematic art, tempted semio-linguists (mainly in the 1970's and 60's during and right after the rise of structuralism) to conduct extensive comparisons between cinema and language, and ultimately view and analyze, even more, *read* films from a SSL approach.

What is relevant for us then in this approach is that it firstly considers cinema, and more particularly film, as a language by its own right, because it consists of a directed (from a sender) sequential arrangement of signs that (willfully or not) relay a message to a (relatively) specific receiver; thus comes the nomenclature of **Cinematic** or **Film Language**, and the codes and laws that regulate and organize it with all its constituent elements, **Film Grammar**. And secondly, a main quest of the SSL approach is that of film's *elementary units of significance*, because since it is considered comparable to *language*, then similarly to it, film should also be composed of minimal units such as *morphemes*, *lexemes*, and *phonemes*²¹.

This structuring of film language is of utmost importance to our research. By recognizing and categorizing film's basic componential elements, and by doing the same with architecture, we draw the parallels between both art forms much easier and clearer.

Thus, as we focus on the most important works developed on this topic, we ground our research on the works of the most influential semiotician and film theorist Christian Metz, and a specific concept by filmmaker/theorist, Pier Paolo Pasolini²².

2.2.2. PIER PAOLO PASOLINI

For Pasolini, the question of the minimal elements that form film is as follows: if the camera captures reality in all its rich details, then why shouldn't the film world be practically equivalent to the real world?

For him the cinema is then a sign system whose semiotics corresponds to a possible semiotics of the systems of signs of reality itself. By asserting the non-existence of a symbolic or conventional filter between the filmmaker and reality, Pasolini assumes that any and all real

²¹ By approaching film as "a language" semioticians and theorists such as Gianfranco Bettetini, Umberto Eco, Pier Paolo Pasolini, Christian Metz, etc. felt it was necessary to prove or disprove that the former contained the *double articulation of natural language*. The concept of the double articulation being a must for any phenomenon to be considered as a "language" was asserted by Andre Martinet.

This concept consisted of structuring language into smaller units of significance (*morphemes and lexemes*) and non-significance (*phonemes*). *Lexemes* and *morphemes* in natural language are units that have meaning, and are considered to be complete signs (signifier + signified) by themselves; as for the *phonemes*, they are the linguistic units that do not have any proper significance by themselves, i.e. they become meaningful only when put in context in sentences or words.

²² Initially we hadn't taken Pasolini's concept of "Im-signs" into consideration in the theoretical part of our thesis. However when we held the *Extended Cinematics Workshop* (ref. Chapter 6) some participants used this concept in their film analysis and then architectural design process; this led us to ultimately include the concise subsection on this concept here below.

world elements represented in film and on-screen become the *minimal units* of the cinematic language. He proposes to call these units, or rather these signs, **Im-signs**²³, in comparison to natural language's "language-signs".

Pasolini doesn't consider these *Im-signs* to be charged with any specific meaning until they are put together in the frame of the camera. Thus, the *im-signs* are in a way contextually significant units comparable to the natural language's *phonemes*.

2.2.3. CHRISTIAN METZ AND *LA GRANDE SYNTAGMATIQUE*: A PRELIMINARY MODEL OF FILM STRUCTURE

Although during the 60's and 70's linguistic theories tackling film were in abundance, they lacked "scientific" depth. Metz however, decided to solve this issue of defining film and its components, i.e. its structure, by going further than anyone before him who used the language model for film analysis.

First of all, Metz made a clear differentiation between cinema and film, and consequently, the "cinematic fact" and the "filmic fact". The *cinematic fact* "refers to the cinematic institution taken in its broadest sense as a multi-dimensional sociocultural complex which includes pre-filmic events (the economic infrastructure, the studio system, technology), post-filmic events (distribution, exhibition, and the social or political impact of film) and a-filmic events (the décor of the theater, the social ritual of movie-going)." ²⁴

As for the *filmic fact*, it refers to the specific discourse that is the *film*, a signifying (artistic) text by its own right. "The art of film on the same semiological "plane" as literary art: the properly aesthetic orderings and constraints – versification, composition, and tropes in the first case; framing camera movements, and light "effects" in the second – serve as the connoted instance, which is superimposed over the denoted meaning." ²⁵

Metz stays faithful then to the principals of semio-linguistics as a study of discourses and texts rather than a whole multi-layered institution such as cinema, and properly frames the analysis of film. Yet he continues his arguments by specifying that *the cinematic institution* also enters into the multi-dimensionality of films themselves as limited discourses with high sociocultural, psychological meanings²⁶. Thus, he further specifies that *the cinematic* doesn't necessarily refer

²³ Pier Paolo Pasolini, *L'Expérience Hérétique: Langue et Cinéma*, Ramsay Poche Cinéma, 1989.

²⁴ Robert Stam, Robert Burgoyne, and Sandy Flitterman-Lewis, *New Vocabularies in Film Semiotics*, Routledge, 1992.

²⁵ Christian Metz, *Film Language: A Semiotics of the Cinema*, The University of Chicago Press, 1974, p. 92.

²⁶ Christian Metz, *Imaginary Signifier: Psychoanalysis and the Cinema*, Indiana University Press, 1982.

to the industry anymore, but to the corpus of *the filmic* phenomenon, maintaining the fact that the relation between films and cinema (and the cinematic), is the same as the relation between the novels, books, etc. and literature, and statues and sculpture. *Film* then is an autonomous artistic work capable of generating a text, while *Cinema* is the ideal sum total of films and their traits.

Secondly, in contrast to his predecessors who believed that words and sentences in language were (respectively) similar to shots and sequences, Metz underlines the principle differences between film language and natural language as follows:

1. "Shots are infinite in number, contrary to words"²⁷ they rather resemble more a complete statement. A limited number of words (since the lexicon is finite) can produce an infinite number of statements, whereas the number of possible shots in a film is practically infinite, depending on the lighting, camera angle, acting nuances, etc.
2. Shots are created and used by filmmakers, whereas *words* are used by every person who speaks a language²⁸: "The speakers of an ordinary language constitute a group of users; film-makers are a group of creators."²⁹ Film is therefore a unidirectional communication directed from the filmmaker(s) to their viewers.
3. A single shot contains an indefinite amount of information unlike a *word* that conveys a well-defined number of information permutations: in order to describe in written/spoken form the smallest of any given filmic shots, a person has to write down/utter a number of words that are far superior to 1 (Figure 2.1).
4. A shot is an "actualized unit of discourse, an assertion, unlike the word (which is a purely virtual lexical unit), but like the statement, which always refers to reality or a reality"³⁰ open to interpretations and different uses.
5. Since they are indefinite in number, "only to a small extent does a shot assume its meanings in paradigmatic contrast to the other shots that might have occurred at the same point along the filmic chain (since the other possible shots are infinite in number), whereas a word is always a part of at least one more or less organized semantic field."³¹

²⁷ Metz, *Film Language*, p. 115

²⁸ Although sometimes new words are created by the speakers of a language, they are primarily pre-existent in lexicons.

²⁹ Metz, *Film Language*, p. 101.

³⁰ Ibid., p. 116.

³¹ Ibid.

House



Figure 2.1 Semiotic Differences Between the Word “House” and an Image of a House.

The word “house” depending on the sender/receiver can have indeterminate interpretations, ranging from the size of the house to its colors, materials, etc.; whereas a shot of a house (right) is much more specific as it describes a single particular house with all its corresponding and integral properties, i.e. “Victorian style house made of wood, with (at least) 4 windows, a front porch, etc.”

Screenshot taken from: “Psycho”, Hitchcock Alfred, Universal Studios, 1960.

Following the above last statement and regarding the fact that most, if not all, films are sequential by nature (if not on the narrative eventual level, then on the sole fact of the consecutiveness of filmic images), the true analogy between film and natural language, Metz argues, occurs on the **Syntagmatic level** and neither on the paradigmatic level nor on the basic units level.

This argument is even truer for “story-telling” films, or **Narrative Films**. Metz discusses thus that:

- a. Narrative has a **Beginning** and an **Ending**,
- b. It is a **Temporal Sequence**: there is the time of the thing told and the time of the telling (the time of the signified and the time of the signifier).
- c. (a) and (b) imply that narrative is a **Discourse** made by a person,
- d. the recited object of the narrative is **Unreal**,
- e. and finally, narrative is a sum of **Events**³².

And so, film becomes a discourse by organizing itself as narrative, and thus producing a body of signifying procedures. While no image resembles another image, most narrative films resemble one another in their principal **Syntagmatic Figures**, units that organize spatial and temporal

³² Ref. Chapter 3.1.3.

relations in various combinations of sequentiality. By moving from one image to another, film becomes language, and similarly to natural language, which combines phonemes and morphemes to form sentences, film language combines images and sounds to form **Syntagmas**, i.e. units of narrative autonomy in which elements interact semantically and syntactically.

Metz classified his syntagmas in 8 types, and structured them in what he refers to as **La Grande Syntagmatique** (Figure 2.2), a typology of the diverse ways that time and space can be ordered.

2.3. SYNTHESIS

In this Chapter we have defined the central object of our research, Narrative Film, and established the preliminary foundations of our theoretical background in general, and the approach we take to analyze and structure film.

As mentioned earlier, in order to proceed with this last approach, we use Metz's *La Grande Syntagmatique* as inspiration; from it, we learn that the Syntagmatic nature of Narrative Film is crucial and has to be taken into consideration at every step of film analysis. Moreover, we also learned in the process of our research that Narrative Film should not be approached only on the syntactic/structural level of segmentation as Metz did; studying Film should also take into consideration its semiotic and spatial dimensions, which, as we will show in the following Chapter, thoroughly affect its structural levels or Architectonics.

Therefore, from Metz, we learn a process of film structuring based on syntagmatic relations, or rather relations that occur *in praesentia* between the different components that composed the Architectonics of Narrative Film.

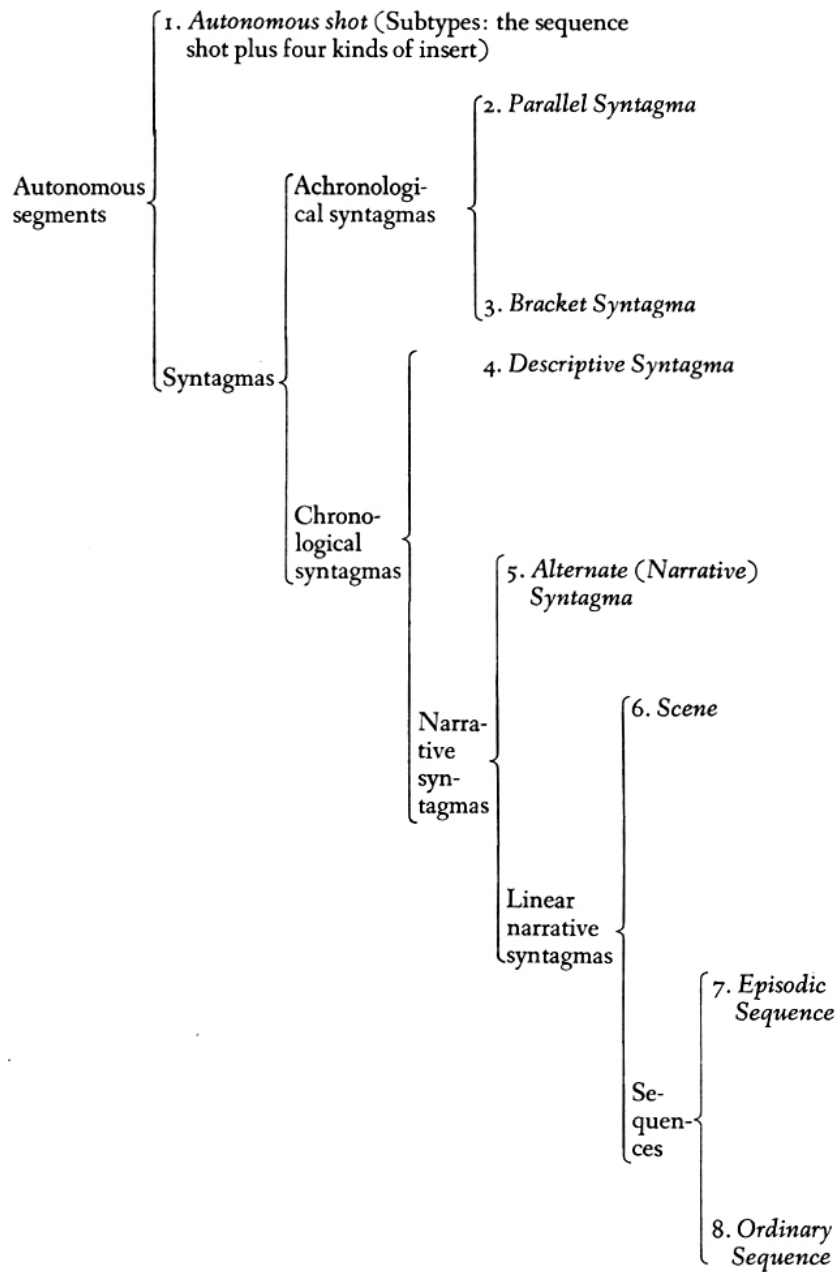


Figure 2.2 Christian Metz's *La Grande Syntagmatique*

Figure extracted from: "Film Language", Christian Metz, *The University of Chicago Press*, p. 146.

CHAPTER 3

ARCHITECTONICS OF NARRATIVE FILM

3.1. NARRATIVE

“**Narrative** can be understood as the recounting of two or more events (or a situation and an event) that are logically connected, occur over time, and are linked together by a consistent subject into a whole.”¹

Narrative, according to Structuralist theory and Seymour Chatman², consists of 2 parts: the **Story** and **Discourse**. Story is the content of Narrative, the chain of events, actions or happenings, that take place in it and provide sufficient information about a subject; on the other hand, Discourse is Narrative’s expression, the means its content is communicated. In other words, Story is the *What* of the Narrative, while Discourse is the *How*.

In the case of our research then, as the Discourse of the Narratives that we study is obviously determined as Film, we will consider from now on that Narrative is equivalent to Story in the broad sense of the definition as quoted in the opening of this section.

Moreover, Russian Formalists in general and Victor Shklovsky’s theories³ in particular, distinguish Narrative into **Fabula** and **Syuzhet** (or Plot in English, a term we will use from this point on):

3.1.1. FABULA

It is understood as the basic outline or raw material of the Story prior to its artistic organization. It is the logical and chronological cause and effects, and relationships between the characters and/or the events of the story.

3.1.2. PLOT

It is the rearrangement of the basic elements of the Fabula. This rearrangement can take place by using artistic narrative techniques such as parallel plots, ellipsis, retardation, reverse chronology, etc. Plot can also be described as the formal manifestation of the Fabula: it can be imagined in terms of form and organization, as it can also be referred to as the structure of the Fabula. Structure in this case refers to the arrangement of, and relations between the parts or elements of something complex.

Fabula is therefore the substance of Narrative in its absolute non-deformed state, whereas Plot represents the structure that re-organizes that substance.

¹ Stam, Burgoyne, and Flitterman-Lewis, p.69.

² Chatman, Seymour, *Story and Discourse: Narrative Structure in Fiction and Film*, Cornell Paperbacks, 1980.

³ Shklovsky, Victor, “Sterne’s *Tristram Shandy*: Stylistic Commentary”, in *Russian Formalist Criticism: Four Essays*, trans. Lee T. Lemon and Marion J. Reis, University of Nebraska Press, 1965, pp. 27-34.

3.1.3. EVENTS

As mentioned in the definitions above, Narrative is the recounting of Events, which are defined as the causal actions and happenings that place, put into relation, affect the Existents (characters and settings in Narrative) and/or are generated or caused by them.

In most “classical” narrative films, the temporal manifestations of the Events are sequential since a cause is always followed by its consequence. This “absolute eventuality” of untamed chronological cause and effect is the Fabula, and the arrangement of the Events in that sequencing is the Plot. However, there exist many narrative films with non-chronological and non-sequential successions of Events; in these cases the Plot can be imagined in terms of form, structure and organization as it re-arranges the Events with artistic narrative techniques such as parallel plots, ellipsis, retardation, reverse chronology, etc. The role of the Plot then becomes the “defamiliarization” of the Story by presenting its Events in an order other than the logical chronological one, as Shklovsky asserts⁴.

3.2. DIEGESIS

The concept of **Diegesis** is very important to film, and is one of the notions that give it its particularities. This concept was introduced to cinema by Etienne Souriau and later expanded into film theory by Christian Metz who asserts that the diegesis “designates the film’s *represented* instance, that is to say, the sum of a film’s denotation: the narration itself, but also the fictional space and time dimensions implied in and by the narrative, and consequently the characters, the landscapes, the events, and other narrative elements, in so far as they are considered in their denoted aspect”⁵; Diegesis is then the audio-visually represented world where the narrative of the film is taking place in.

As the Fabula is the substance of Narrative, Diegesis can be considered the form of that substance. It is the audio-visual manifestation of all things occurring in the Narrative, the ultimately illusory construct of the Narrative Film’s world that sucks in its viewers.

It is crucial to note though, that this represented world is not only the **on-screen** manifestation of the Narrative, but it can also occur, evolve, and continue to thrive off-screen. That is why we make the distinction between on-screen and off-screen Diegesis on one hand, and Intra-diegetic and Extra-diegetic on the other.

⁴ Shklovsky, pp. 27-34.

⁵ Metz, *Film Language*, p.98

3.2.1. ON-SCREEN/OFF-SCREEN

Any and all events, happenings, actions, characters, objects, sounds, etc., that are audio-visually perceived (in the case of auditory messages, the origin of the source of the sound/voice) as being on the screen or in the frame of the projected film, are considered to be **on-screen** occurrences or elements. All opposite situations are designated as **off-screen**.

3.2.2. INTRA-DIEGETIC/EXTRA-DIEGETIC

Intra-diegetic refers to any and all filmic elements (characters, sounds, music, objects, images, etc.) that exist in and affect the Diegetic world, meaning that they affect the course/development of the Narrative and/or are in either direct or indirect relations with its Existents. On the other hand, **Extra-diegetic** refers to any and all filmic elements that exist outside and do not affect the Diegetic world.

That said, Existents and Events always have a combination of the above properties in the following manner:

- **Intra-diegetic and On-Screen:** Events and/or Existents are seen, heard, and occur on-screen and affect the course of the story.
- **Intra-diegetic and Off-Screen:** Events and/or Existents are not seen, can or cannot be heard, or don't occur on-screen, but affect the course of the story.
- **Extra-diegetic and On-Screen:** The most common examples to describe this situation are the opening and closing credits of a film; although the viewers can see the text appearing and disappearing on-screen, it doesn't have any effect on the Diegetic world.
- **Extra-diegetic and Off-Screen:** The most common examples here are the musical soundtracks of almost all commercial narrative films, or the voice of a narrating person describing the events unfolding on-screen; both of these occur in a such a way that doesn't affect the Diegetic world, and neither of their sources are seen on the screen.

3.2.3. EXISTENTS

The characters in addition to the elements that constitute the Diegetic environment they inhabit are designated as **Existents**⁶. In Narrative Film, they are any and all character and object that is seen, heard, or even mentioned (by another character). We distinguish 2 types of Existents:

⁶ Chatman, 1980.

- **Characters:** which are the people, animals or objects that either generate or cause Events, or are affected by them,
- **Settings:** the “geographic” locations in the Diegetic world where the Characters exist, and where the Events occur.

Existents need not always be directly seen or heard in order to exist in the Diegetic world: it is enough that one or more on-screen Existents mention or refer to another never seen or heard of Existent in order for the viewer to understand that the latter exists in that particular world. Thus the Diegetic world is composed of **Implied Existents** and **Explicit Existents**: the latter are those that are seen and heard on-screen at least once in the film; whereas the former are never seen nor heard by the viewers for the whole duration of the film. Thus the existence of the Implied Existents depends on them being referred to or mentioned by the Explicit Existents.

In consequence, the Diegetic world itself becomes distinguished into an **Implied Diegesis** and an **Explicit Diegesis**, each composed of their own corresponding type of Existents: the Implied Diegetic is never seen nor heard, and it only exists in the imagination of the viewers who construct it based on the information conveyed to them by the Existents “populating” the Explicit Diegetic world.

3.3. SHOTS, SYNTAGMAS AND SEGMENTS

3.3.1. SHOTS

The smallest unit of significance in most mainstream narrative films (the category of films our study focuses on) is the **Shot**, a continuous flow of images uninterrupted by editing and not constrained to any specific duration. The shot is only limited and defined by the beginning and ending of the capturing process of the camera (photographic or digital).

At least one shot is required to make a film, or part of it (e.g. *Russian Ark*, the first truly single-shot film in history). Moreover, “if the shot is not the smallest unit of filmic significance, it is at least the smallest unit of the filmic chain.”⁷

3.3.2. SYNTAGMAS

The most common model of film syntax is the combination of multiple shots put together with editing processes (or optical devices) to form meaningful **Syntagmas**. Thus, syntagmas are

⁷ Metz, *Film Language*, p.106.

groupings of one or more shots with or without optical devices, with or without camera movements. The limits of Syntagmas are simultaneously linked to and independent of the general narrative and diegetic structures of the film: they are linked because some of the syntagmatic configurations that constitute the narrative film are only found in relation to the story and more generally in relation to the actions taking place in the world of the told story (i.e. in relation to the Diegesis); different because these constructions don't have the level of abstraction of general narrative constructions. The latter constructions are completely independent from the signifiers (the sensible, material, acoustic or visual signals which trigger a mental concept) that convey them, while the syntagmatic ones are founded on represented (figurative) elements that are visible on screen.

3.3.3. SEGMENTS

As for **Segments**, they are blocks of Syntagmas that are joined together containing information relevant to the understanding of the narrative of the film in total. In most narrative films, these Segments are articulated with optical devices and/or non-narrative segments (themselves constituted of syntagmas with no narrative significance). The delimitation of Segments is not always easy since their limits follow more the filmmaker's way of using/arranging the basic film elements than a clear general rule: for example, a fade-in/fade-out is sometimes used to simulate the view from an opening/shutting eye and not to delimit a segment. Moreover the limits of a Segment are also relative to the way every viewer/analyst reads the film and what they are looking to extract from it: in the case of our study for example, since we are architects addressing to architects, our process of film segmentation is quite different from one performed by, say a sociologist looking to investigate some contextual/periodic social issues; where we are more interested in the film's structural, organizational and spatial levels, i.e. its syntactic levels, the latter would be more interested in the semantic levels, segmenting and analyzing the film in ways that respond better to their study.

3.3.4. OPTICAL DEVICES

The **Optical Devices** are series of optical signs used during the editing phase of filmmaking: fade to black, dissolve, fade-out, etc.

They are used as punctuating devices that separate, articulate and mark the beginning and ending of shots, syntagmas and segments depending on their contextual use in the film by the filmmaker. They are not however indispensable tools in filmmaking: there are countless films ranging from the commercial to the experimental, and from the narrative fictions to the non-

fiction documentaries, that do not contain any ODs; their articulations are thus accomplished by means of clear-cut editing (on the syntactic level) and the arrangement of their contents. As we will see in the following Chapter 4, in the case of *Russian Ark*, the film does not even contain any type of editing, yet it is still structured and articulated in a clear and comprehensible way.

ODs are important elements in film grammar, but as we have just explained, their use depends purely on the choice of each filmmaker, and so do the meanings and functions assigned to them.

3.4. ARCHITECTONICS OF NARRATIVE FILM: A PRELIMINARY MODEL OF NARRATIVE FILM STRUCTURE

Having apprehended all the different notions that define Narrative Film, we use Metz's *Grande Syntagmatique* as an inspiration to build our own preliminary model of its Structure (Figure 3.1). The fundamental differences between our model and that of Metz's, is that the latter is more of a typological study of film Syntagmas, whereas ours is more of a componential one. Metz's initial quest was also to find the utmost minimal unit of significance in films, and in doing so he elaborated his model, which on many levels than not is syntactic.

However, our interest in films is not purely syntactical. As our ultimate goal is the conversion of films into architecture, we believe the semantic levels should be more present in our work especially that architecture itself is not only a syntactic construct⁸.

To include the semantic levels of Narrative Film in its structural model, is to include Narrative, Diegesis and all of their own Sub-Components. We have to clarify that we use the term Components and Sub-Components to differentiate between elements that we consider as smaller parts of a larger whole, subsets to larger sets, and those that we consider as different types of a same notion. We are more interested in the former than the latter. That is why we consider our Preliminary Model of Film Structure as a study of the Architectonics of Narrative Film, a study of the parts that put together builds a coherent entity both on the semantic and the syntactic levels.

⁸ Referring to the semantic levels of architecture, which as elaborated by Umberto Eco, are the *Primary* and *Secondary* functions. Eco, Umberto, Function and Sign: The Semiotics of Architecture, in *Signs, Symbols and Architecture*, Broadbent Geoffrey, Bunt Richard and Jencks Charles (eds.), John Wiley & Sons Inc., 1980.

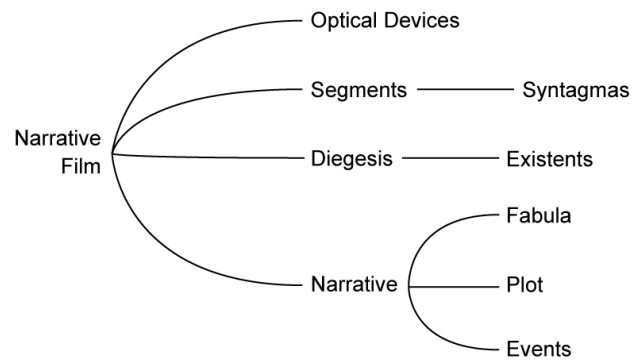


Figure 3.1 Preliminary Model of Film Structure

Narrative Film is composed of the following Components: Optical Devices, Segments, Diegesis and Narrative.

Syntagmas are the Sub-Components of Segments, Existents are the Sub-Components of Diegesis, and Fabula, Plot, and Events are the Sub-Components of Narrative.

Shots are not included here because based on Metz, they are considered as a type of Syntagma.

CHAPTER 4
ARCHITECTONIC SPATIAL STRUCTURES IN NARRATIVE FILM
CASE STUDY OF *RUSSIAN ARK*

4.1. ABOUT *RUSSIAN ARK*

*Russian Ark*¹ (RA) is a 95 minute² long, single-shot Russian film directed by Alexander Sokurov in 2002. The story consists of the wandering of two figures inside the St Petersburg's State Hermitage Museum, Russia: the first figure, the "Stranger"³, is seen by the spectators, whereas the second (the Camera-Figure, or CF, as he will be further referred to) is not. The only indications the viewers have of the latter's existence are his voice (that of Sokurov himself), the camera movements (representing his own visual trajectory in space) and the Stranger communicating with him. The wanderings of these two figures take them through more than 40 different spaces of the Hermitage Museum's Theater and Winter Palace (where most of our analysis is focused in), while interacting with each other and other characters representing 200 years of selected Russian/Hermitage history (from Peter the Great to the last days of the Romanoff dynasty).

We have chosen RA as a case study in our research because it is considered a revolutionary film on the technical level of cinematographic production, since it was the first ever feature-length film to be filmed entirely in a single continuous 95 minute shot without resorting to any montage⁴. The production of RA was made possible thanks to the high-definition digital steady-cam (with a portable hard-drive capable of registering around 100 minutes of uncompressed footage) that was specially developed for this film. The video images were later transferred to conventional 35mm film for cinema screen projection purposes.

Filming a feature-length film in a single-shot sequence constrained, or rather enabled Sokurov (the writer, director, visual concept and principal image designer of RA) to elaborate a film grammar unique to him and this film; by omitting a well-established specific cinematic code, we hypothesize that, Sokurov, in need of some sort of punctuation device to pace and structure his film, resorted to a Non-specific Code⁵, i.e. the Architectural Code, and more specifically the architectonic codes of the Hermitage Museum. This means that the cinematic code of montage

¹ The actual Russian title transliterated with Roman letters reads: *Ruskii Kovcheg*. The title on the Japanese DVD we use in our research is: 「エルミタージュ幻想」 (Erumitaaju Gensoh).

² The full running time as read on the time-track of the Japanese version of the DVD registers 95minutes and 21seconds.

³ Designation based on the name given to the character in the closing credits of the film.

⁴ Alfred Hitchcock's *The Rope* was the most notable attempt in producing a single-shot sequence film without editing/montage. However, technically it cannot be considered as such, since Hitchcock used 3 film rolls to shoot the whole film (technical limitations of the celluloid films), and each roll of film is connected to the other by means of editing techniques. Moreover the opening sequence contains one more editing point as the camera moves from an external view to an internal one. Since these edits are hardly noticeable during the film, some analysts and theorists consider it as the first single-shot sequence film.

⁵ Ref. Chapter 3.6.

in RA is replaced by the architectonic codes of spatial structuring. Thus the critical reason for our choice of RA is our belief that this film could play an intermediary role between film and architecture.

4.2. SEGMENTATION OF *RUSSIAN ARK*

Since RA is a single-shot sequence film, already “the smallest unit of the filmic chain”, we find that although we cannot segment it directly following the *Elementary Units of Film* model used to structure “classic” films, we can at least use it as a reference.

Therefore, as a starting point we make the following hypothesis: as defined earlier in Chapter 3.5, a single-shot sequence “is a continuous flow of images (and sounds) uninterrupted by editing”. It means that the shot itself can be considered to be made of smaller units which are the aforementioned “images and sounds”. Therefore RA is made of audio-visual signifiers; and since it is a narrative film, some of these signifiers must unconditionally convey narrative significance. In this case study then, we consider audio-visual signifiers to be “narrative”, those signifiers that denote Existents/characters and events that themselves denote specific historical time-periods. These signifiers are also filmed with a camera in constant movement. Consequently, we consider that the correlations between these different forms of significance, meaning the audio-visual signifiers and camera movements, form syntagmatic relationships⁶; and since in RA these narrative audio-visual signifiers and camera movements are grouped together according to common themes (each grouping represents a specific character, time-period and/or event), we consider these groupings as Narrative Syntagmas (Σ).

More specifically, we define as Σ those syntagmas in which: 1) the Stranger has meaningful conversations with other on-screen characters, or 2) on-screen characters are recognized to have historical significance, or 3) sufficient meaningful intra-diegetic audio-visual information is conveyed to the viewers in order to assimilate the represented time-period of the segment. Thus the delimitation process of the Σ is done following the on-screen appearance and disappearance of these significant characters or the significance conveying audio-visual elements. Consequently, all syntagmas that do not fulfill one of the above criteria are considered as non-narrative syntagmas (δ).

In Table 4.1 we indicate each Σ with a designation, their position and limits on the time-track, the historical period they refer to, and finally a description of their content. Then following the

⁶ Ref. Chapter 3.5.

camera's on-screen movements inside the Hermitage Winter Palace, we trace its actual trajectory on the floor plans of the museum in order to position the Σ in the corresponding spaces they appear in and also in the order of their appearance.

Observing the distribution of the Σ in the spaces of the Hermitage in Figure 4.1 we notice that in addition to their clear limitations in actual screening time, they are also well defined in and limited to particular spaces. We therefore designate by \mathbf{E} the group of all spaces that contain Σ , and by \mathbf{E}_x a particular space that contains Σ_y , and so we have $\mathbf{E}_x \supset \Sigma_y$ (x and y indicate respectively the designation of a particular \mathbf{E} and Σ as specified in Figure 4.1, e.g. $\mathbf{E}_4 \supset \Sigma_c$); and we designate by $\mathbf{\varepsilon}$ the group of spaces that contain \mathbf{NNS} .

We also notice that the relation between \mathbf{E}_x and Σ_y is not always a "1 to 1" relation, as there are 6 cases where 1 Σ occurs in 1 corresponding \mathbf{E} , 5 cases where 1 Σ occurs in a corresponding n number of \mathbf{E} (where $n > 1$), and where an m number of Σ occur in 1 \mathbf{E} (where $m > 1$). Therefore we conclude that in RA there are 3 types of syntagma-space relations:

Type1: $\mathbf{E}_x \supset \Sigma_y$ (1 to 1 relations: 1 space includes 1 narrative syntagma),

Type 2: $n\mathbf{E}_x \supset \Sigma_y$ (n to 1 relations: a number of spaces include the same narrative syntagma),

Type3: $\mathbf{E}_x \supset m\Sigma_y$ (1 to m relations: 1 space includes multiple syntagmas).

Table 4.1 Delimitation and Designation of the Narrative Syntagmas

Narrative Syntagma Designation	Time limits on the Time-track (hh:mm:ss)	Referred Historical Period	Description of Syntagma content
Σ_A	00:05:52-00:07:44	17 th Century	Peter the Great venting out his anger
Σ_B	00:12:08-00:13:59	18 th Century	Young Catherine the Great admiring theater rehearsals
Σ_C	00:17:02-00:21:35	21 st Century	Contemporary Figures
Σ_D	00:23:30-00:23:40	19 th Century	Brief appearance of Pushkin
Σ_E	00:23:46-00:31:58	19 th +21 st Century	Conversation with the Blind Woman in the presence of Russian Navy soldiers and museum clerks
Σ_F	00:34:44-00:38:30	21 st Century	Conversation with “the Talented Boy”
Σ_G	00:40:24-00:42:36	21 st Century	Conversation with ex-ballerina Alla Osipenko
Σ_H	00:43:42-00:44:14	20 th Century	World War II segment 1: marching soldiers and overhead airplanes
Σ_I	00:46:46-00:48:14	20 th Century	World War II segment 2: the siege of Stalingrad
Σ_J	00:49:36-00:52:10	18 th Century	Old Catherine the Great
Σ_K	00:54:20-01:00:31	19 th Century	Nicholas Romanoff I receiving the Persian ambassador
Σ_L	01:02:57-01:06:55	20 th + 21 st Century	Discussion between 3 Generations of Hermitage Directors
Σ_M	01:08:29-01:10:35	20 th Century	Nicholas Romanoff II & Family having dinner
Σ_N	01:11:40-01:23:44	20 th + 21 st Century	Last Dance Ball in the Palace
Σ_O	01:23:44-01:28:46	20 th Century	Final Procession

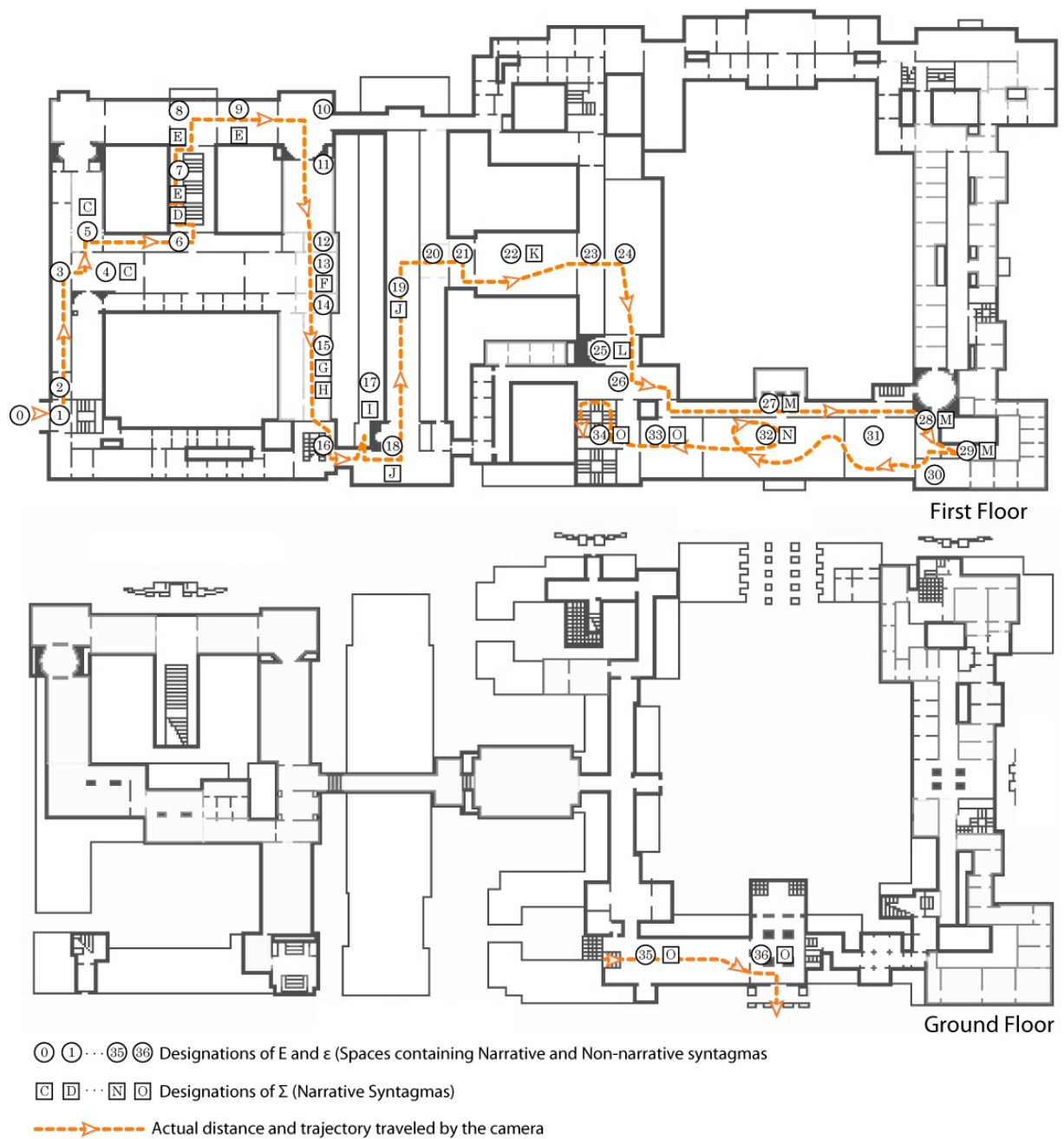


Figure 4.1 Narrative and Non-narrative Syntagmas Positioning and Camera Trajectory

Original floor plans courtesy of: Hermitagemuseum.org
Designations added by the author.

These types of syntagma-space relations in themselves constitute larger sets of syntagmas that we designate as **Narrative Segments**, or **NS** (where **NS_z** would be a particular **NS** and *z* the designation of a **NS** as indicated in Figure 4.2) expressed in the following manner:

1. **NS_z(T₁): E_x \supset Σ_y** (where NS is a narrative segment composed of Type1 relations);
2. **NS_z(T₂): nE_x \supset Σ_y** (where NS is a narrative segment composed of Type2 relations);
3. **NS_z(T₃): E_x \supset m Σ_y** (where NS is a narrative segment composed of Type3 relations).

Based on the typologies and expressions described above, we lay out the detailed compositions of **NS_z** in Table 4.2a, and then place them in space on the floor plans of the Hermitage Winter Palace in Figure 4.2; noting that the on-screen temporal delimitations of **NS_z** are based on the following 2 criteria:

Visual Limits (VL): start point is when **E_x** becomes **on-screen** even before being physically penetrated; end point is when **E_x** becomes off-screen. These limits are considered as the limits of the **NS_z**.

Physical Limits (PL): start point is when the camera actually enters **E_x**; end point is when the camera actually exits **E_x**. These are considered as the limits of the **E_x**.

We illustrate how these **VL** and **PL** manifest themselves in RA by extracting their corresponding screenshots and inserting them in Table 4.2b. The actual on-screen start/end points of each **VL** and **PL** of every **NS** is thus placed accordingly in their corresponding column/row.

Finally, having laid out in detail the temporal and spatial limits of the narrative segments **NS**, what remains of the film as space and time falls in the category of **non-narrative segments (NNS)** that are composed of non-narrative syntagmas. **NNS** are also positioned on the floor plans of the Hermitage in Figure 4.2.

We conclude this section by establishing the criteria⁷, specific to RA, which delimit, identify and define its segments:

- 1) Unity of action:** the **on-screen**, intra-diegetic manifestation of Existents/characters, Events and sounds of narrative significance that represent a same historical time period in spaces **E_x**;
- 2) Type of Demarcation:** The on-screen limits of **NS (VL-PL)** are dependent on and in function of **on-screen**, intra-diegetic architectonic elements such as doors and thresholds;













⁷ Ref. Chapter 3.5

3) Syntagmatic Structure: $NS_z(T_1; T_2; T_3): nE_x \supset m\Sigma_y$ (where NS_z is composed of Type1 or Type2 or Type3 space-syntagma relations, and where $n \geq 1$ and $m \geq 1$ but not simultaneously > 1).

Table 4.2a Detailed Composition and Space/Time Delimitations of Narrative Segments

Narrative Segment Designation	Visual Limits (hh:mm:ss)	Physical Limits (hh:mm:ss)	Composition of the Narrative Segments
NS ア	00:16:53	00:17:01 - 00:21:47	$NS_{\text{ア}}(T_2):(E_4+E_5) \supset \Sigma_C$
NS カ	00:23:09 - 00:31:13	00:23:17 - 00:31:01	$NS_{\text{カ}}(T_2, T_3):[(E_7 \supset (\Sigma_D + \Sigma_E)), ((E_7+E_8+E_9) \supset \Sigma_E)]$
NS サ		00:34:42 - 00:38:41	$NS_{\text{サ}}(T_1):E_{13} \supset \Sigma_F$
NS タ	00:38:56	00:39:26 - 00:45:02	$NS_{\text{タ}}(T_3):E_{15} \supset (\Sigma_G + \Sigma_H)$
NS チ	00:46:54 - 00:48:22	00:47:04 - 00:48:19	$NS_{\text{チ}}(T_1):E_{17} \supset \Sigma_I$
NS ハ		00:49:03 - 00:52:36	$NS_{\text{ハ}}(T_2):(E_{18}+E_{19}) \supset \Sigma_J$
NS マ	00:54:00 - 01:01:03	00:54:20 - 01:00:43	$NS_{\text{マ}}(T_1):E_{22} \supset \Sigma_K$
NS ヤ	01:03:03	01:03:07 - 01:07:07	$NS_{\text{ヤ}}(T_1):E_{25} \supset \Sigma_L$
NS ラ	01:07:46	01:08:13 - 01:11:05	$NS_{\text{ラ}}(T_2):(E_{27}+E_{28}+E_{29}) \supset \Sigma_M$
NS ワ	01:11:06	01:11:51 - 01:23:58	$NS_{\text{ワ}}(T_1):E_{32} \supset \Sigma_N$
NS ン	01:23:28	01:23:58 - 01:29:15	$NS_{\text{ン}}(T_2):(E_{33}+E_{34}+E_{35}+E_{36}) \supset \Sigma_O$

Table 4.2b VL/PL On-Screen Start/End Points

Narrative Segments	VL Start	PL Start	PL End	VL End
NS ア	 00:16:53	 00:17:01	 00:21:47	
NS カ	 00:23:09	 00:23:17	 00:31:01	 00:31:13
NS サ		 00:34:42	 00:38:41	
NS タ	 00:38:56	 00:39:26	 00:45:02	

NS ナ	 00:46:54	 00:47:04 ここは初めてだ 妙に寒いね	 00:48:19 死体を踏みつけにしようって！	 00:48:22 死体を踏みつけにしようって！
NS ハ		 00:49:03 自由に階段はつぎません	 00:52:36 彼女が 突然 消えてしまいました	
NS マ	 00:54:00 聖が好評で	 00:54:20	 01:00:43	 01:01:03 この豪華な装飾は大好きだ
NS ヤ	 01:03:03 また逃げたわね	 01:03:07	 01:07:07	
NS ラ	 01:07:46	 01:08:13 私たちが自由なのでしょう？	 01:11:05	

NS ヲ	 01:11:06	 01:11:51	 01:23:58	
NS シ	 01:23:28	 01:23:58	 01:29:15	

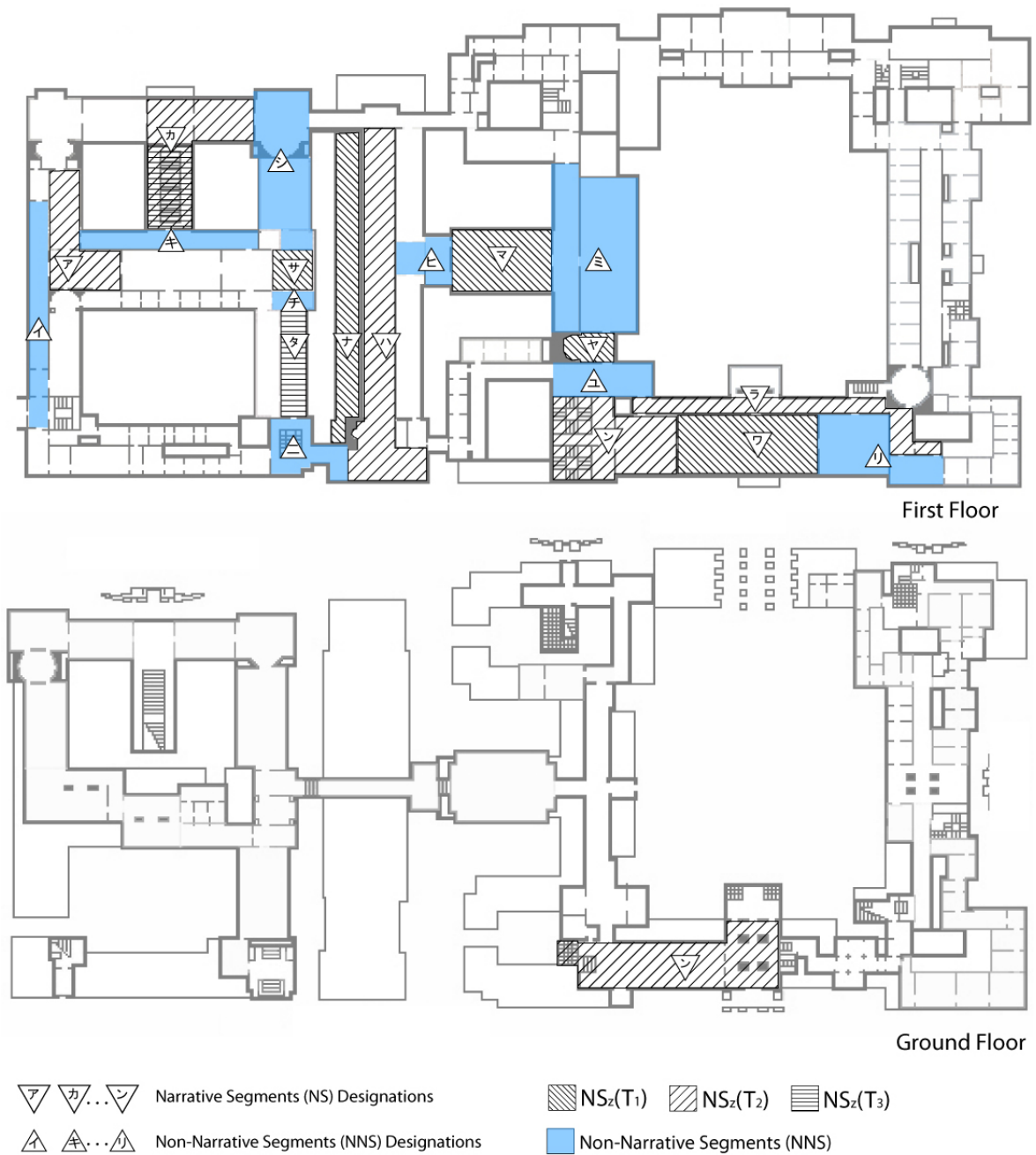


Figure 4.2 Narrative and Non-Narrative Segments Spatial Positioning

*Original floor plans courtesy of: Hermitagemuseum.org
Hatches and letter designations added by the author.*

4.3. ANALYSIS OF *RUSSIAN ARK'S* DIEGETIC SPATIAL STRUCTURE

As defined in Chapter 3.3, diegesis is the represented instance of the narrative, the audio-visual manifestation of its space and time dimensions.

Just as an actual architectural spatial structure is composed of the total amount (addition) of all the spaces that constitute it, so is the Diegetic Spatial Structure (or **Ds**); which means that the Ds of RA is the accumulation of the group of spaces that contain narrative segments (i.e. E), and the group of spaces that contain non-narrative segments (i.e. ϵ), expressed as: $Ds=E+\epsilon$. Consequently, Ds is any and all Hermitage space captured by the camera, visible on-screen, and seen by the viewers (Figure 4.4).

At this stage, following the camera's trajectory that we traced in Figure 4.1, and the result of placing the Ds on the floor plans, we begin to have a clearer view of the shape of RA's diegesis' spatial structure, which is linear. However this is made possible because of the availability of Hermitage's Winter Palace floor plans, something that is not very common; which means that this method is not sufficiently general to describe the architectonics of a film's diegetic structure.

We proceed then by following a relatively more generalized method of analysis, but keeping in mind the linear structure as a starting hypothesis. Since all films are made of syntagmas, or at least a single shot, we use our findings concerning the segmentation and syntagmas (Section 4.2) to demonstrate the above hypothesis. As previously discussed, the narrative and non-narrative segments of RA are in designate as Diegetic Progression Graph, or **DPG** (Figure 5a).

The Abscissa (x axis) of the DPG represents the actual function of the screening time, and completely dependent of, in correlation with, and contained in the spaces of the Hermitage; furthermore, the on-screen (dis)appearance of the spaces being also in function of the screening time of the film, we place all of the above interrelated elements (space-time-segment) in a bi-axial function graph that we screening time (T) of RA (including opening and closing credits, a total of 1hour 35minutes 21seconds), and its units are hh:mm:ss. The values placed on it are the Physical Time Limits (PL) values from Table 4.1. The Ordinate (y axis) represents the group of all spaces filmed in the Winter Palace (Ds); the numbers on it are not values, but the designation of the spaces (E_x and ϵ_x) in Figure 4.1, and they consist of ordinate segments and not points. As for the origin O, it represents the Threshold (Figure 4.3, and E_0 in Figure 4.1) from which the camera enters the Winter Palace that occurs at t=00:14:17. And finally, the bold lines with the Kana designations on the left represent NS_z (narrative segments) delimited in time and space, and as for NNS_z (non-narrative segments), they are represented by the dotted lines with the Kana designations on the right (both designation based on Figure 4.2). We observe in the DPG

that D_s is in function of T , and NS_z and NNS_z advance in function of their corresponding coordinates in time and space, giving us the following: $D_s=f(T)$, and $NS_z(E_x;t)$ and $NNS_z(\varepsilon_x;t)$.

We give the following two examples of the actual space-time coordinates of a NS_z for further clarification:

$NS_{\mathcal{T}}[(E_4+ E_5);(00:17:01,00:21:47)]$, and, $NNS_{\mathcal{T}}[(\varepsilon_6);(00:21:47, 00:23:17)]$.

Now, applying a Regression Model on the **DPG** (Figure 5b), it appears that $D_s=f(T)$ where f is a **Linear Function**. Since the value of T can only be positive (before the origin O the film cannot exist), it is clear then that as time progresses positively (forward), NS_z and NNS_z and their corresponding spaces have to progress also forward. Using the model in Figure 5b, we can also define the **Spatial Velocity** of RA as being the angle α , where $\alpha \in [0^\circ; 90^\circ]$. A larger value for α implies a larger number of **Ds**, **NS** and **NNS** seen in a smaller amount of screening time T (and vice versa).

Based on the **DPG** we have demonstrated that the hypothesis proposed earlier in this section was correct: the properties of RA's diegetic spatial structure are in fact **linear**, and **progressive**. Moreover, this structure is expressed and regulated in relation to the **NS** and **NNS** (spaces containing narrative and non-narrative segments) put together.



Figure 4.3 The Threshold

Screenshots of the Threshold: point of entry of the Stranger and the Camera to the Hermitage Winter Palace, the section of the Hermitage Museum where we focus our analysis on.

Screenshots taken from Russian Ark.

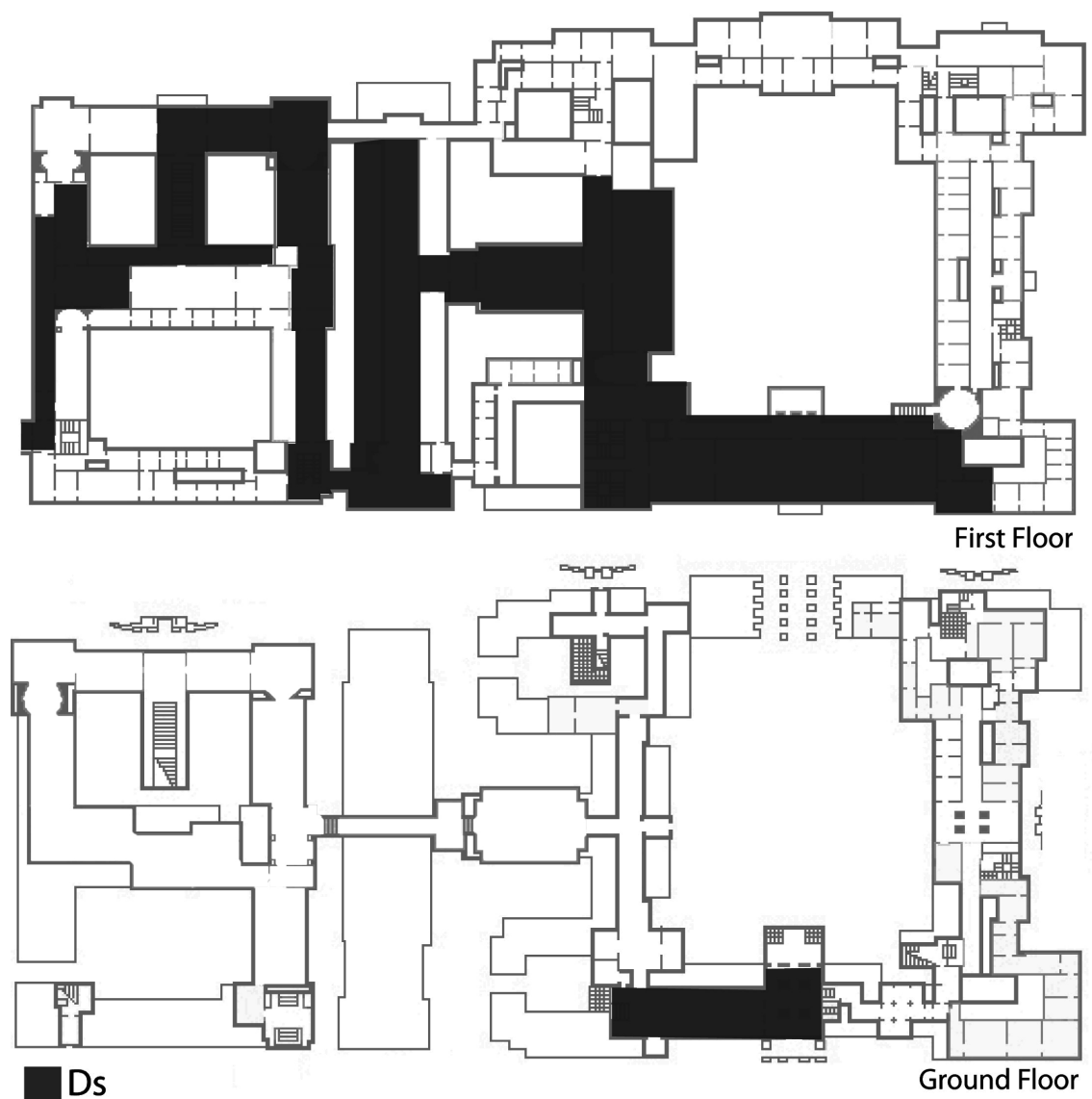


Figure 4.4 Totality of spaces that contain narrative and non-narrative syntagmas/segments

Spaces captured by the camera, visible on-screen, and seen by the viewers (Ds).
Original floor plans courtesy of: Hermitagemuseum.org
Shading added by the author.

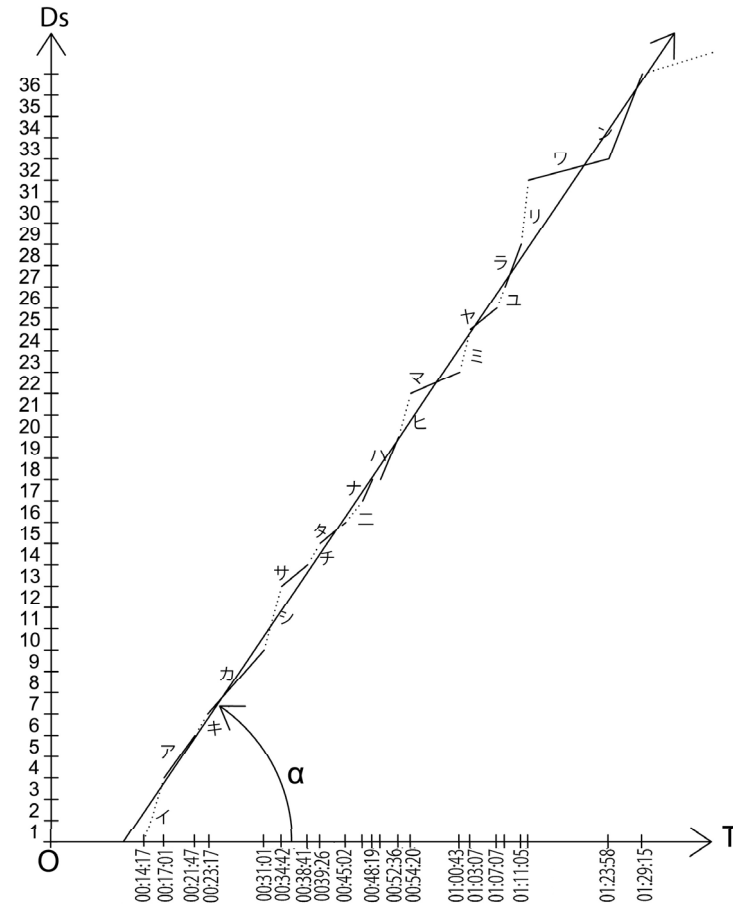
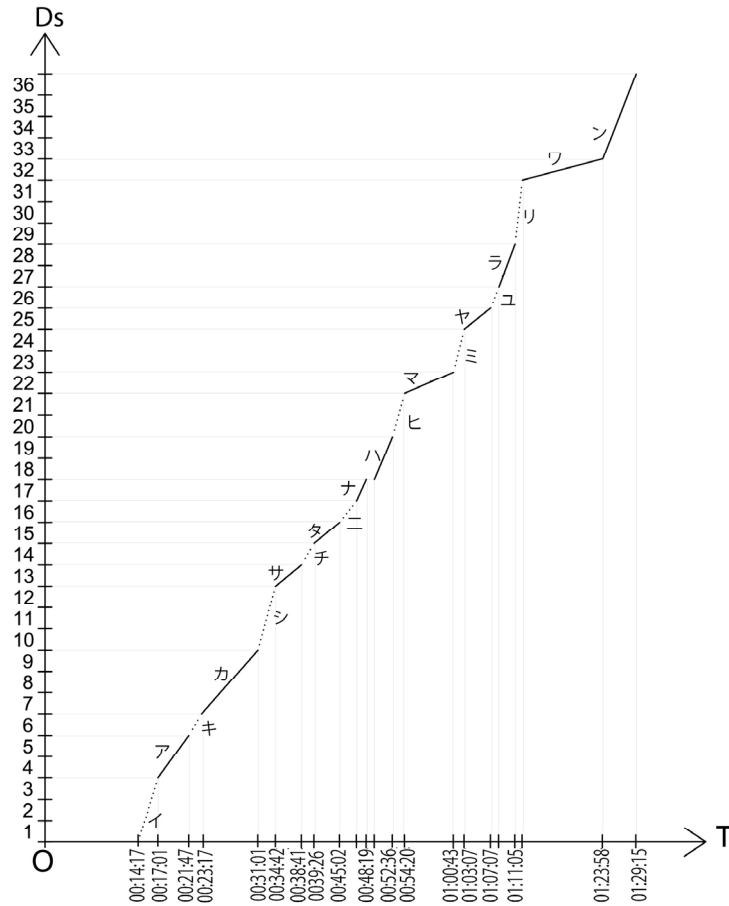


Figure 4.5a DPG (Diegetic Progression Graph) and Figure 4.5b Regression Model applied on the DPG

The progression of spaces (Ds), narrative and non-narrative segments (NS and NNS) is in function of the progression of the time (T).

$Ds=f(T)$ is a linear function and α represents the Spatial Velocity Angle of *Russian Ark*.

The Kana designations of NS and NNS are based on Figure 4.2. The numbers on the x axis are designations of spaces containing narrative and non-narrative syntagmas E_x and e_x (Figure 4.1). The values of T are expressed in Hours:Minutes:Seconds based on the Physical Time Limits from Table 4.2.

4.4. ANALYSIS OF *RUSSIAN ARK'S* NARRATIVE ORGANIZATIONAL STRUCTURE (PLOT)

As explained earlier in Section 4.1 of this chapter, the story of RA consists most importantly of conversations, interactions with, and appearances of Existents/characters and Events referring with significance to different historical time-periods (Table 4.1); and as discussed in Section 4.2, these Existents/characters and Events are considered in themselves the minimal narrative signifier, i.e. narrative syntagmas (Σ), contained in architectural spaces and limited by architectonic elements. Moreover, as demonstrated in Section 4.3, the movement of the camera, and consequently the spatial structure of the diegesis are linear and progressive, which means that the Σ themselves unfold linearly and progressively during the screening of the film.

However, the time-periods represented in their corresponding Σ are not arranged chronologically in RA, and a quick observation of Table 4.1 confirms this: the Σ in the table are classified in their order of appearance (from top to bottom), and yet the historical periods they represent are non-chronological, and the number of narrative “time-jumps” (the change from one historical period to another in the narrative of the film) seems to exceed the number of actual Σ since three of them represent simultaneously 2 historical periods each (Σ_E , Σ_L and Σ_N).

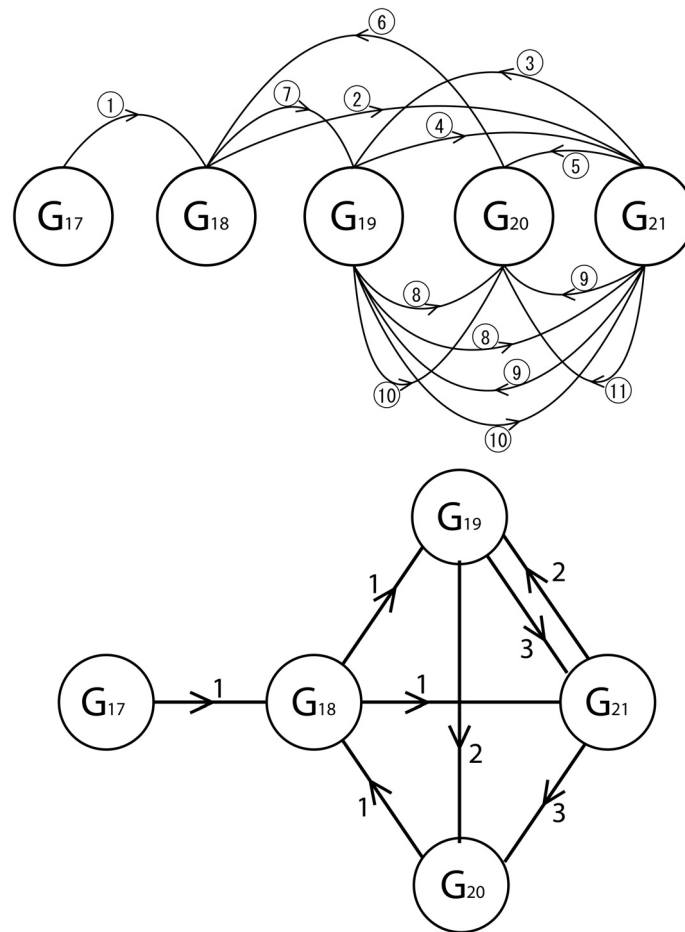
In order to better understand these time-jumps, specify their frequency and between which historical periods they occur, and since time-jumps are directional in theory, we use a directional graph that we call **Narrative Time Digraph 1** or **NTD1** (Figure 4.6a). In **NTD1**, based on the classification in Table 4.1, we group together all the Σ that represent a similar historical period. These groups are designated as G_n , where n is the century the contents of G represent (e.g. G_{19} is the group of Σ_y that represent the 19th Century), giving us the following 5 groups: G_{17} (where $G_{17} \supset \{\Sigma_A\}$), G_{18} (where $G_{18} \supset \{\Sigma_B; \Sigma_J\}$), G_{19} (where $G_{19} \supset \{\Sigma_D; \Sigma_E; \Sigma_K\}$), G_{20} (where $G_{20} \supset \{\Sigma_H; \Sigma_I; \Sigma_L; \Sigma_M; \Sigma_N; \Sigma_O\}$), and G_{21} (where $G_{21} \supset \{\Sigma_C; \Sigma_F; \Sigma_G; \Sigma_L; \Sigma_N\}$). And so G_n become the vertices of the graph, while the arcs represent the time-jumps, designated as **TJ**. Finally, the arcs are assigned numbers that represent the order of a time-jump's occurrence in RA.

In **NTD1** we therefore have the following relation: $TJ_i = (G_n, G_n')$ where the arc TJ_i is directed from G_n to G_n' (i is the number assigned to the arc).

The non-chronological, non-linear nature of the time-jumps that we observe in Figure 4.6a is further emphasized when represented in a second diagram, **Narrative Time Digraph 2** or **NTD2** (Figure 4.6b), where the edges are weighted according to the number and direction of TJ_i

that occur between two G_n (arcs in Figure 4.6a). **NTD2** is also organized based on the increase in the weight of the edges, from the smallest weight (left) to the largest (right).

In this section we placed groups G_n of Σ in the chronological order they would have been in if they weren't rearranged by the film's **Plot** (Figure 4.6a), while the time-jump connections (the arcs in the graph) distorted their progressive linearity; which means that this chronological organization represents the **Fabula**, while the organization of the G_n connected by the time-jumps that gave us **NTD2**, is one of the possible forms of the Plot, i.e. the structural organization of the narrative, which arrange the Σ and consequently the **NS** in RA.



**Figure 4.6a NTD1: Narrative Time Digraph 1
(top)**

**and Figure 4.6b NTD2: Narrative Time Digraph
2 (bottom)**

$G_{17}...G_{21}$: group of all the NS that represent the same historical period (the number represents the century).

NTD1: Numbers on arcs represent the order of a time-jump's occurrence.

4.5. SYNTHESIS

1. In Section 4.2, we concluded that the **syntagmatic structure of the narrative segments** (the structure of the smallest significant elements in RA) is defined as $NS_z(T_1; T_2; T_3): nE_x \supset m\Sigma_y$, where NS_z is dependent on an actual architectural space E_x ;
2. The **demarcation of the segments** is defined by the on-screen limits of **NS(VL-PL)** that are set in function of **on-screen**, intra-diegetic, actual architectonic elements such as doors and thresholds;
3. In Section 4.3, we found that the progressive linear form of the **Diegetic Spatial Structure** of RA is expressed as a Linear Function of $Ds=f(T)$, which led us to conclude that NS_z and NNS_z having the respective coordinates $(E_x; t)$ and $(\epsilon_x; t)$, are dependent and in function of actual architectural spaces;
4. And finally in Section 4.4, we found that the **Narrative Spatial Structure**, or **Plot**, the structure that gives form to, and rearranges the story and all of its contents, is non-linear with digraph properties.

The first three points lead us to conclude that actual architectonic elements (from Hermitage's Winter Palace), which are denoted instances in the film, regulate, structure and give shape to the segments and diegesis of RA; this means that actual architectural **Spatial Units**, depending on their arrangement, numbers and correlations could be considered similar to **Syntagmas** and **Segments** (more specifically: Syntagmas similar to Spatial Units, and Segments similar to **Aggregates of Spatial Units**), while their **Spatial Organizational Structure** becomes similar to the Diegetic Spatial Structure.

As for the last point, it leads us to conclude that since Narrative is the substantial dimension of Narrative Film, we consider it similar to the substantial dimension of architecture, which means the **Program** (or **Primary Function**), and consequently the **Plot** (Narrative Organizational Structure) would become similar to **Diagram** (Programmatic Organizational Structure) in Architecture.

COMPLEMENTARY SECTION: ANALOGY INTERPRETATION POSSIBILITIES 1

CASE STUDY OF *RUSSIAN ARK* AND YOKOHAMA *OSANBASHI*

In this complementary section we conduct a brief analysis on the semiotic, spatial and functional properties of the Yokohama *Osanbashi* International Ferry Terminal (Figure 4.7), as a way to illustrate the possible architectonic interpretations of the analogy conclusions reached above in Section 4.5.

In order to hypothesize that *Osanbashi*'s properties can illustrate these possibilities, it is critical for the former to have some similarities with the properties of RA; therefore, we note that the selection of *Osanbashi* was purely intuitive at first⁸, but by further investigating these preliminary similarities it came to us that 1) our preliminary intuitions were correct, and 2) we can use these similarities between an existing architecture and a narrative film to further understand and illustrate the interpretational and design possibilities of film components.

We have grouped these found similarities under 3 titles: *Linearity & Dynamism*, *Interflow & Overlapping*, and *Punctuation*.



Figure 4.7 External view of the Yokohama Osanbashi International Ferry Terminal

Image courtesy of the author.

CS.1.1.1. ABOUT YOKOHAMA *OSANBASHI*

Osanbashi, conceived, designed and completed in 2002 by *Foreign Office Architects* (FOA), is a transportation hub and terminal for international and domestic ferries. It also has many different spaces for open public uses such as a park on the roof, and indoor/outdoor exhibition areas. The building's general dimensions are approximately 430x70x15m, and a total surface area of 48.000m². It is comprised of 3 main levels: the Roof Level (the main public interface

⁸ We had coincidentally noticed multi-level similarities between *Osanbashi*'s properties and those of RA while on a leisure visit to Yokohama Port in the Fall of 2008.

acting as park), the Intermediate Level (the ferry passengers handling space, conference space, shops, restaurants...), and the Lower Level (the car parking space, and machines and technical areas).

CS.1.2. LINEARITY AND DYNAMISM

In *Osanbashi*, the dynamic material architectonic elements and signifiers are omnipresent. The latter are materialized primarily by 1) the ubiquitous wooden deck, with its angular, curvy and bumpy fluctuations with its naturally linear pattern (Figure 4.8, Top), 2) the continuous handrails and the slanted light poles (both made of thin linear tubes) and shaders that follow every movement generated by Osanbashi's artificial landscape (Figure 4.8, Top), 3) the folded steel ceiling (Figure 4.8, Bottom right), and 4) *Osanbashi*'s proportions of 430x70x15m that render it a thin horizontal layer of mass with indistinct denotations when seen from far (Figure 4.8, Bottom left).



Figure 4.8 Views of Osanbashi depicting some examples of its dynamic architectonic elements and signifiers

Images courtesy of the author.

Except for bottom left image, courtesy of: "The Yokohama Project", Actar, 1999.

Moreover, the wooden deck plays an important role in breaking the barriers between interior and exterior, as the latter stays intact when transitioning from one type of space to the other (Figure 4.9). This material and pattern uniformity, in reference to the horizontal plane that is treated as a single pliable surface, intensifies the experience of circulation as it engenders visual continuity and a virtually uninterrupted physical movement throughout the construct.



Figure 4.9 The wooden deck is used uniformly for internal and external spaces
Image courtesy of the author.

In order to represent this fluid dynamic state of *Osanbashi*, we have recorded on video the experience of moving through the construct, using a single-shot technique. We adopted a random path crossing through its different sections avoiding taking the same route twice (Figure 4.10).

Afterwards, random frames were picked-out from the shot film using 4Media Software Studio's Video Capture and submitted to Adobe Photoshop's Topaz Simplify plug-in's edge tracing. Hence, the highlighted elements resulting from this procedure, the wooden deck, the handrails, the bollards and the ceiling's structural pattern, are representative of the architectonic elements contributing the most to the dynamic and linear effects (Figure 4.11).

Osanbashi's properties of Linearity and Dynamism are thus manifested in the form of concrete and tangible, e.g. "denoted", objects that define and shape its spaces, and in consequence, its spatial organizational structure and actual form.

Going back to the analysis of RA, we had demonstrated that its Diegetic Spatial Structure was Linear, and its Diegetic Progression quite Dynamic. Moreover, in RA's analysis Synthesis, we had also reached to the conclusion that the Diegetic Spatial Structure in film is analogous to the Spatial Organizational Structure in architecture; consequently, we can assume that the manners in which *Osanbashi*'s architectonic properties of Linearity and Dynamism are expressed are possible architectural interpretations of those same diegetic properties found in narrative film.

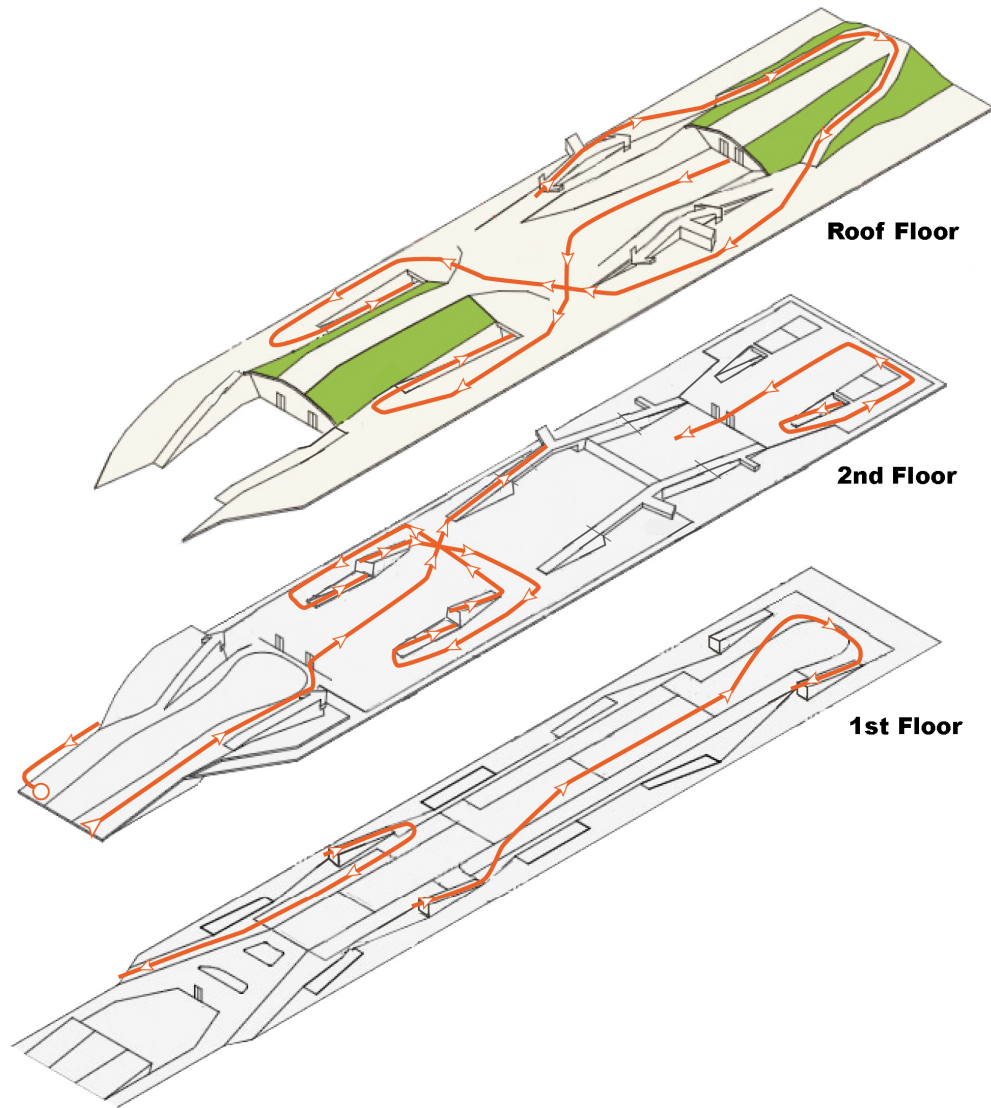


Figure 4.10 Path taken by the author's camera

The movement was exclusively forward never taking the same path twice, except for 2 points of crossing.

Original exploded axonometric illustrations courtesy of: Osanbashi.com

Arrowed lines added by the author.

CS.1.3. INTERFLOW AND OVERLAPPING

In addition to the omnipresent wooden deck and automatic glass doors that blur the limits of the different spaces and emphasize the effect of one space flowing into another, FOA describes *Osanbashi's* programmatic strategies as “intensive space: the kind of spatiality where the capacity of space is not directly related to its size, and where the quality of space varies differentially, rather than as a discontinuity”. Therefore the container and the contained are in indirect relation, and independent of each other; that means that the architectural spaces of *Osanbashi* remain constant, while the functions that inhabit them and the amount of floor area needed, become the variable ones (Figure 4.12).

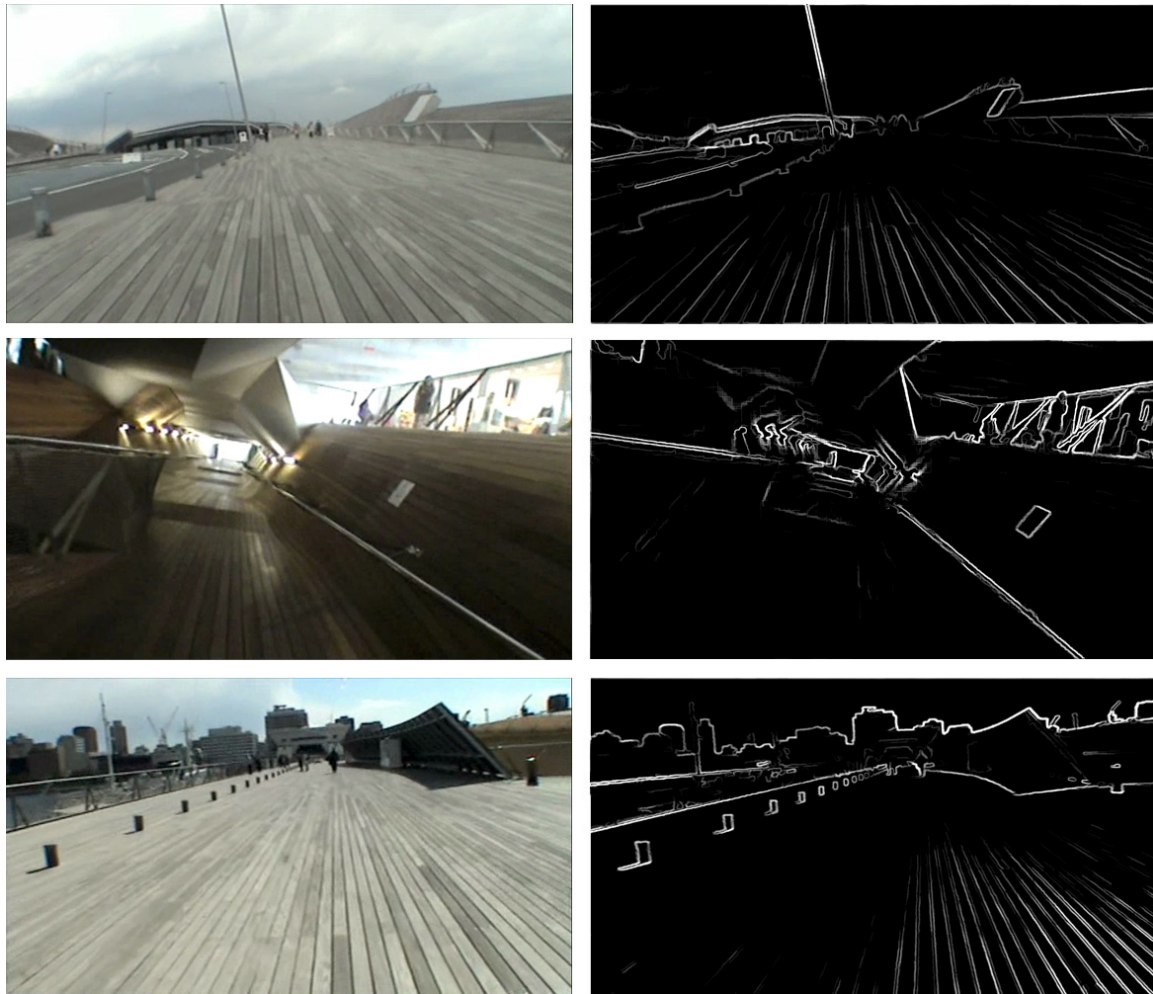


Figure 4.11 Sample of edge detection and tracing of the Osanbashi highlighting the dynamic architectonic elements.

Images courtesy of the author.

The actual realization of the afore-mentioned strategy is made possible (1) by the existence of small-scale, mobile functional objects such as shops, cafes, ticket desks, etc., defining the limits of the larger functions they serve, (2) by the usage of mobile furniture with predetermined locations (Figure 4.13), and (3) by using the variable geometry of the building itself as a programmatic support depending on the occasion, season and events.

Consequently, this means that at a certain level, different programs are capable of existing (1) in one space but in different times, (2) in different spaces but at the same time, or even (3) in one general space and at the same time, separated or not by the mobile furniture, the small-scale functional objects or simply by the amount of actual space needed (Figure 4.12).

In RA, we had asserted that the VL of a NS were defined by the on-screen appearance of its corresponding E; in other words, while the camera is still in one E (or ϵ), the viewers can already see ahead and know where the camera will lead them, giving the impression of relative

interflow between NS. And since we had already concluded that NS are analogous to Aggregates of Spatial Units, then this parallel between RA and *Osanbashi* can be considered a good example of interflow manifestation.

As for the concept of Overlapping in RA, we had shown (Figures 4.1 & 4.2, and Tables 4.1 & 4.2a) that different Existents/characters (minimal narrative signifiers in RA) from different eras coexist in the same NS, implying that different narratives (or narrative fragments) overlap each other on a certain level in the same NS. And since a NS is similar to an Aggregate of Spatial Units, and Narrative similar to Program, then the Overlappings of RA and *Osanbashi* become also similar.

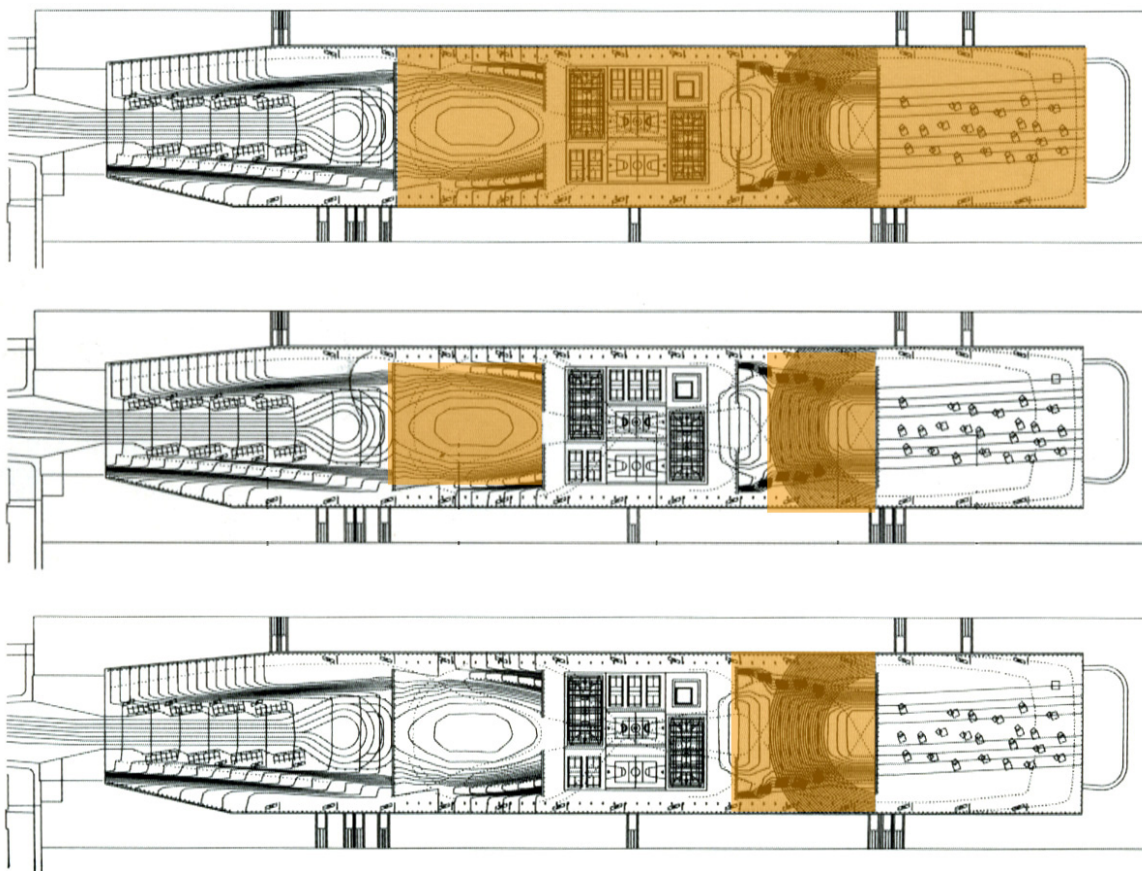


Figure 4.12 Three examples of spatial scenarios depending on use and timing. From top: use of all spaces at the same time, use of 2 separate spaces at the same time and use of a singular space. The programmatic overlapping occurs in space but not in time.

*Diagram courtesy of: "The Yokohama Project", Actar, 1999.
Highlights added by the author.*

CS.1.4. PUNCTUATION

In *Osanbashi*, there exist programmatic punctuations that are somewhat independent of the general formal aspects of the construct itself. As mentioned earlier, the spaces of *Osanbashi* are

more of spatial “guidelines” that do not constraint directly their inhabiting functions; it is the smaller, mobile functional units that regulate the rhythm of the spaces, depending on their position in space and time, their size and numbers (Figure 4.13).



Figure 4.13 Examples of mobile furniture and functional units, clockwise from top: removable seating bollards, check-in counter, foldable Japanese border.
Images and drawing courtesy of: “The Yokohama Project”, Actar, 1999.

Moreover, in more conventional constructs, the circulation patterns are conceived as servers for served functions; or in some other cases the circulation path is designed first and then other functions would be implanted on its trail; but in both cases the circulation pattern is considered an independent architectonic element by itself. As for FOA’s Yokohama Ferry Terminal, the building is the circulation and vice versa. In this specific case the circulation pattern cannot be separated from the other architectonic elements; as the circulation equals the building, the material elements that define circulation are themselves components of the main structural elements of the building (i.e. the ramps support moving people as well as parts of the building). Hence, this circulation pattern molds the space, the form and the structure of *Osanbashi*. That is why there exists a vital need for space/ time punctuation via the use of entities external to the original materiality of this architecture: without the former, notions of pace would be lost, since *Osanbashi* is generated first and foremost around a dynamic circulation pattern.

The parallel of this architectural Punctuation concept in RA was seen in the form of its populating Existents/characters: 1) they appeared in specific points along the general narrative and diegesis (similarly to the *Osanbashi* functional units that exist in its programmatic/spatial structure), 2) they were some of the elements that defined the syntagmatic structure (similarly to the *Osanbashi* functional units that define its spaces’ programmatic structure), 3) they

generated individual Narrative Events that were centered on them (similarly to the functional units where each type of unit generates its own particular functions), and 4) they were mobile (similarly to the *mobile* functional units).

CS.1.5. CONCLUSIONS OF THE COMPLEMENTARY SECTION

In this Complementary Section 1, we have given some basic architectonic illustrations of the Film-Architecture analogies exhibited in Section 4.5 of this Chapter.

These illustrations are examples of how the above architectural analogies of filmic notions can be interpreted in architectonic terms and thus used in architectural conception and design. Moreover, we emphasize that the examples we have given here are only a handful of possibilities, and readers of our thesis should not be limited only to them. As we will further develop and demonstrate in this dissertation, the number of ways filmic notions can be interpreted architectonically is limited only by the imagination of each architectural designer.

In addition to this analysis serving us as illustration, we also make some noteworthy observations concerning the surprising similarities between RA and *Osanbashi*: if RA relies so deeply on the Hermitage Museum's spatial organization to tell its story, and if this film and the Yokohama *Osanbashi* have so many similarities, wouldn't that imply that the Hermitage itself and *Osanbashi* should also be similar?

On almost every level the above-mentioned architectures cannot be further apart: programmatically, the Hermitage Museum was originally conceived as a regal palace, a structure to house and please the needs of an elite; *Osanbashi* is a "utilitarian" architecture, built to serve the city and the larger public. Formally and semiotically, *Osanbashi* tries to disappear, and willfully escape any attempts to limit and compare it to other preexisting structures; as for the Hermitage, it imposes its presence by the scale of its volume and its lavish decorations both referring to political and financial power, thus having inseparable primary (denoted) and secondary (connoted) functions⁹. On a structural level, one is made of massive stone while the other is built to be as light as possible using steel. Spatially, one's spaces are dynamic, unconstrained by materiality, and interflowing, while the other's spaces are well defined, static and fragmented.

⁹ Umberto Eco discriminates two types of architectural functions, the primary function and the secondary function, based on the classification of denotation and connotation in semiotics. The primary (denoted) function often signifies the actual utilitarian function and the secondary (connoted) function signifies symbolic function. (Eco, Umberto, "Function and Sign: The Semiotics of Architecture", In *Signs, Symbols and Architecture*, edited by Broadbent Geoffrey, Bunt Richard and Jencks Charles, John Wiley & Sons Inc., 1980, pp.11-69).

Accordingly, RA is a *cinematographic* representation of the Hermitage Museum's architecture; and it is this representation that holds the signs of similitude with the Yokohama *Osanbashi*, as the real object and its representation are completely different entities. Hence, RA is on many levels *a sign that refers to* the Hermitage; and a single sign, depending on its reader, has the quality of being interpreted into different connotations.

Consequently, what we have tried to exhibit in this Complementary Section 1 are the different common connotations that an architecture like *Osanbashi* and a film like RA could have; since these two works of art have so much in common without having any initial voluntary relations, it is therefore largely possible to willfully generate this correlation between a Film and Architecture.

What we can also deduce from the above analyses is that RA and *Osanbashi* meet on the *Structural* level, and on a deeper *Meaning* level: in this Complementary Section 1, the properties of *Linearity and Dynamism* constitute the *Formal* level, the general expressive aspect of each of the studied objects. As for the *Punctuation* properties, it is the manifestation of the *Structuration* of the space/time dimensions. And finally, *Overlapping and Interflow* constitute elements of the abstract *Meaning* level.

CHAPTER 5
ARCHITECTONIC SPATIAL CONNECTIONS
AND FUNCTIONAL RELATIONS IN NARRATIVE FILM
CASE STUDY OF SHORT CUTS

5.1. ABOUT *SHORT CUTS*

Short Cuts (or SC as it will further be referred to) is a 1993 drama directed by Robert Altman. Its screenplay, written by Altman and Frank Barhydt, is inspired by 9 independent short stories and a poem originally by Raymond Carver. The actions take place in and around the city of Los Angeles, following the daily lives of 9 different couples/families, in 9 corresponding and intermixed stories. The general themes of the latter revolve around the subjects of infidelity, death, parent/child disgruntlement, and intra-couple frustrations.

The distinction between these 9 stories is primarily accomplished by the focus of each of them on specific, central and recurring Existents/characters (hence the character-centricity of SC): this distinction starts directly from the opening credits sequence of the film where it is actually composed of the main introductory segments to the Existents/characters central to each story.

Moreover, the 9 stories with their proper Existents seem to be largely independent from each other and have autonomous Events¹, which makes us consider them as 9 **Narrative Entities**, or **NE**, which when brought together by cinematic means define one single larger Narrative that is the general narrative of SC (the Existents/characters of its 9 families and couples are specified in Table 1 along with their corresponding NE designations). This hypothesis is not however completely true in the case of SC² because at multiple instances of the film's running time, the 9 NE intersect and overlap as their central Existents/characters appear and/or interact with each other in the same segment; these spatio-temporal occurrences/reactions lead us (and the viewers) to assume that 1) the Events in the NE of SC unfold in simultaneous narrative times (over a period of roughly one week), 2) the corresponding intra-diegetic geographic Existents/settings of their actions are most likely in relatively close vicinities, and 3) the 9 NE although having a considerable degree of autonomy, are on certain levels, either narrative or syntactic, dependent of, and in relation with each other as we will demonstrate further below.

Finally, we have chosen to analyze SC as a follow-up to our previous work on RA for the following reasons:

¹ With the exception of NE_{Kn} and NE_{Wy} that are in direct relations with each other from their very first appearances.

² There are however many films constituted of Narrative Entities that have a much higher degree of independence and autonomy from each as the only thing joining them is mainly the common film title they are being shown under (e.g. *Tokyo!*, 2008, consisting of 3 different narratively independent short films shot on location in Tokyo by 3 different filmmakers: Joon-ho Bong, Leos Carax and Michel Gondry), and/or the same filmmaker who filmed them (e.g. *Dreams*, 1990, 8 separate short films shot by Akira Kurosawa), and/or a common general theme (e.g. *Night on Earth*, 1991, by Jim Jarmusch where 5 different short films revolve around 5 taxi cabs and their drivers).

- 1- SC and RA have comparable yet different narrative and diegetic organizational structures: the former has fragmented narrative and diegetic structures and the latter a continuous diegesis but a fragmented narrative structure; and while the latter depends on actual architectonic elements to structure its narrative and diegesis, the former does so by depending solely on filmic elements;
- 2- SC is one of the best executed examples³ of a multiple narrative film (omnibus narrative) as Altman successfully grouped and joined together (on all layers of narrative, diegesis, film semantics and syntax, etc.) the 9 Raymond Carver stories that were originally completely unrelated to each other;
- 3- And last but not least, our interest in the subtle yet powerful means that Altman uses to connect disparate narrative segments and 9 NE, which we believe can offer important insight for using comparable means when connecting functionally and/or spatially differential spaces in architectural design.

Table 5.1 Designations and Correspondences of the 9 Narrative Entities of *Short Cuts*

Designation	Family/Couple
NE _B	Honey and Bill BUSH
NE _F	Ann, Howard, Casey and Paul FINNIGAN
NE _{Kn}	Claire and Stuart KANE
NE _{Ks}	Lois, Jerry, Joe and Josette KAISER
NE _P	Doreen and Earl PIGGOT
NE _S	Sherri, Gene, Sandy, Will and Austin SHEPARD
NE _T	Tess and Zoe TRAINER
NE _{We}	Betty, Stormy and Chad WEATHERS
NE _{Wy}	Marian and Ralph WYMAN

³ Robert Altman was nominated for the 1994 Academy Award for Best Director and shared a nomination for the 1994 Golden Globe Award for Best Screenplay with Frank Barhydt; the cast won a Special Golden Globe Award for their ensemble performance. *Short Cuts* was also nominated for the 1995 Best Foreign Film at the French Cesar Awards, and won the Golden Lion and the Volpi Cup for Best Ensemble Cast at the 1993 Venice Film Festival.

A complete and thorough nominations and awards list for *Short Cuts* is available on the following link: <http://www.imdb.com/title/tt0108122/awards>

5.2. SEGMENTATION OF *SHORT CUTS*

In SC, the syntagmatic structure is relatively easy to apprehend: the 9 short stories or NE, revolving around their corresponding Existents/characters, are broken down into smaller **Narrative Segments (NS)**, and then shuffled and intermixed together; the limits of NS are recognized by the abrupt editing cuts (clear-cuts) that simultaneously lead to another NS and NE (except for rare exceptions). The latter is directly recognized by its central Existents (characters and settings) and the corresponding Events revolving around them. Thus, the Existents and Events in SC are pivotal to the perception of the NS limits: at some points of the film many types of syntagmas (with changing camera angles and Existents/settings) come into play together, rendering the syntactic limits of a NS quite unclear if not for the unity of action⁴ of the Event depicted in the syntagmas and/or the continuous audio/visual presence of the corresponding Existents.

Yet the delimitation and structuring of the NE by their NS is more obvious in terms of on-screen time than space: we illustrate this in the **Segmental Time-Track**, or **STT** (Figure 5.1) by assigning a color to each NE and positioning their corresponding NS on the time-track based on their on-screen appearances. The segmental discontinuity (hence the narrative and diegetic discontinuities) of each NE is also made obvious in the **Layered Segmental Time-Track**, or **LSTT** (Figure 5.2), by the voids separating their corresponding NS.

Since SC is more than 3 hours long (including roughly 144 NS), too long and too dense to be analyzed fully and in detail, we extract a shorter section to focus on. The extracted section is 30mins 21sec long, starts at 00:48:17 and ends at 01:18:38 of the film's time-track, and is composed of 22 NS containing all 9 NE. We have chosen this specific 30min section because 1) it is quite a manageable time length for an in-depth analysis, 2) it is neither in the introductory section nor in the concluding section of the general narrative of the film, meaning that all the important elements of all the NE have already been established and set in their places at this point, 3) based on the STT, it is the densest section of the film in terms of NE/time ratio⁵, where the largest number of NE intersections is also located, thus leading to a higher concentration and diversity of inter and intra-segmental connections and relations, and finally 4) structurally, the section is a representative sample of the film's narrative and segmental structures (as can be seen in Figure 5.2), eliminating the need to analyze the entirety of the film.

⁴ Ref. Chapter 3.5

⁵ The introductory opening sequence of the film which lasts for about 15mins, its first 30mins are actually the densest of the film in terms of segment/NE/time ratio, but it is interrupted by the opening credits and the narratives are not yet established, which might render the in-depth analysis less consistent.

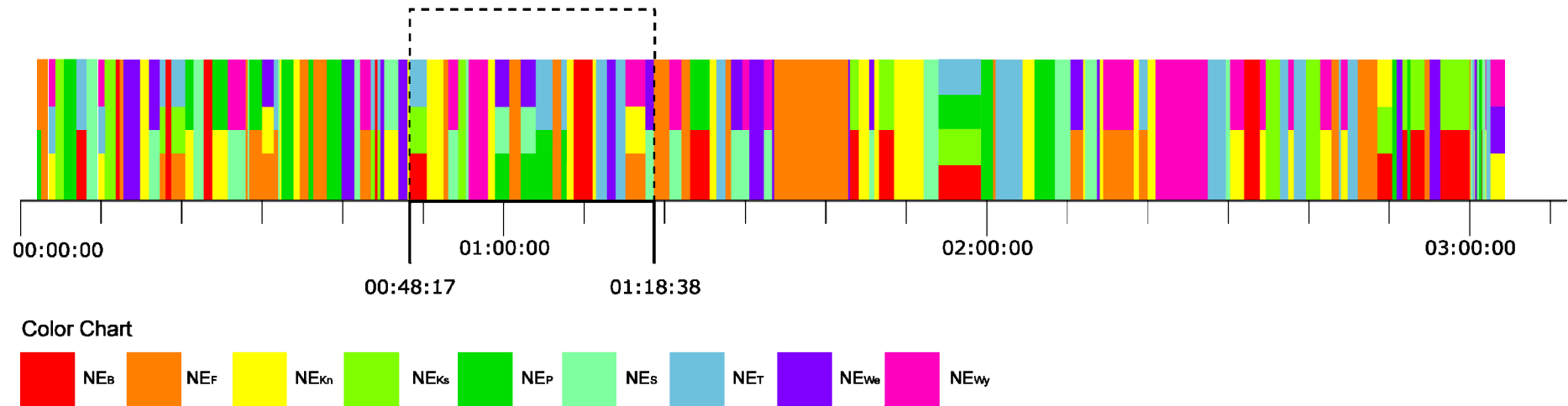


Figure 5.1 Segmental Time-Track (STT) of Short Cuts

Each column represents a Narrative Segment (NS), and each color represents a Narrative Entity (NE).

The bottom horizontal line represents the running time of the film from the opening credits (00:00:00), to the closing credits (03:08:07).

The columns with more than 1 color represent the NS that contain more than 1 NE Existents, in other words they are the NS where the corresponding NE intersect.

The dotted rectangular region is the 30mins 21sec section of SC on which we focus our in-depth analysis.

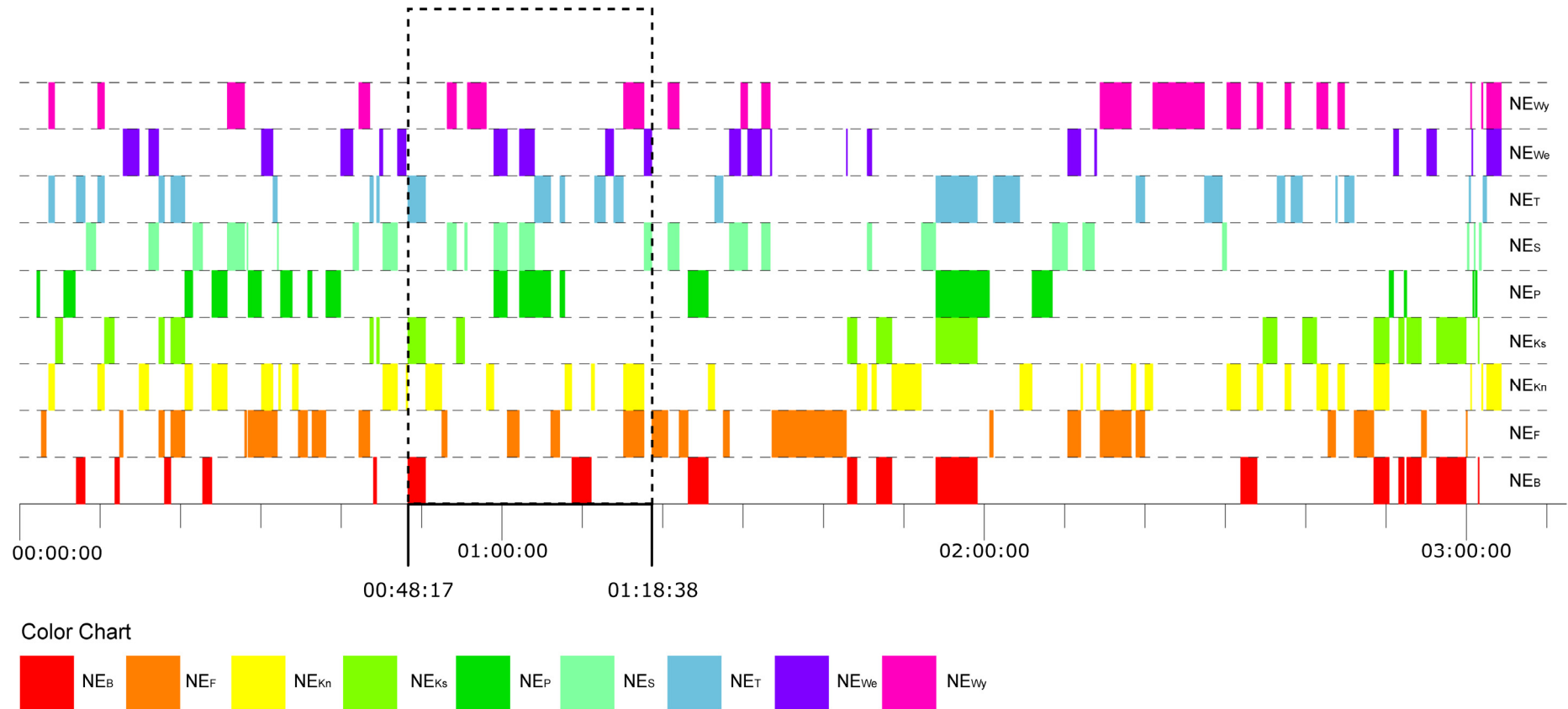


Figure 5.2 Layered Segmental Time-Track (LSTT) of *Short Cuts*

Each NE from the STT from Figure 5.1 is put on a different layer without changing its original position/temporal coordinates. The fragmentation of the NE is thus emphasized in this Figure by exposing the actual time gaps between each appearance of a NS containing Existents of the same NE.

5.3. SEQUENTIAL INTER-SEGMENTAL CONNECTIONS

The 3 hour long shuffling of 9 different NE along with the total 144 NS of SC, the use of the clear-cut editing technique to individually and sequentially connect them together, and the unexpected change in Existents and Events depicted in the NS, would be somewhat “violent” and disorienting for viewers, breaking their concentration in trying to understand and follow the contents of the viewed NS, and in consequence, resulting in the eventual loss of interest in the film. Thus, Altman, as we discuss here, uses intra-diegetic audio-visual elements as an additional connection process complementing the clear-cut editing; these **Inter-Segmental Connections**, or **ISC** (Figure 5.3), as well as being connectors of consecutive segments, play the role of buffers alleviating the impact of the abrupt segmental/NE alterations by echoing elements perceived in one NS into its successor in the segmental chain.

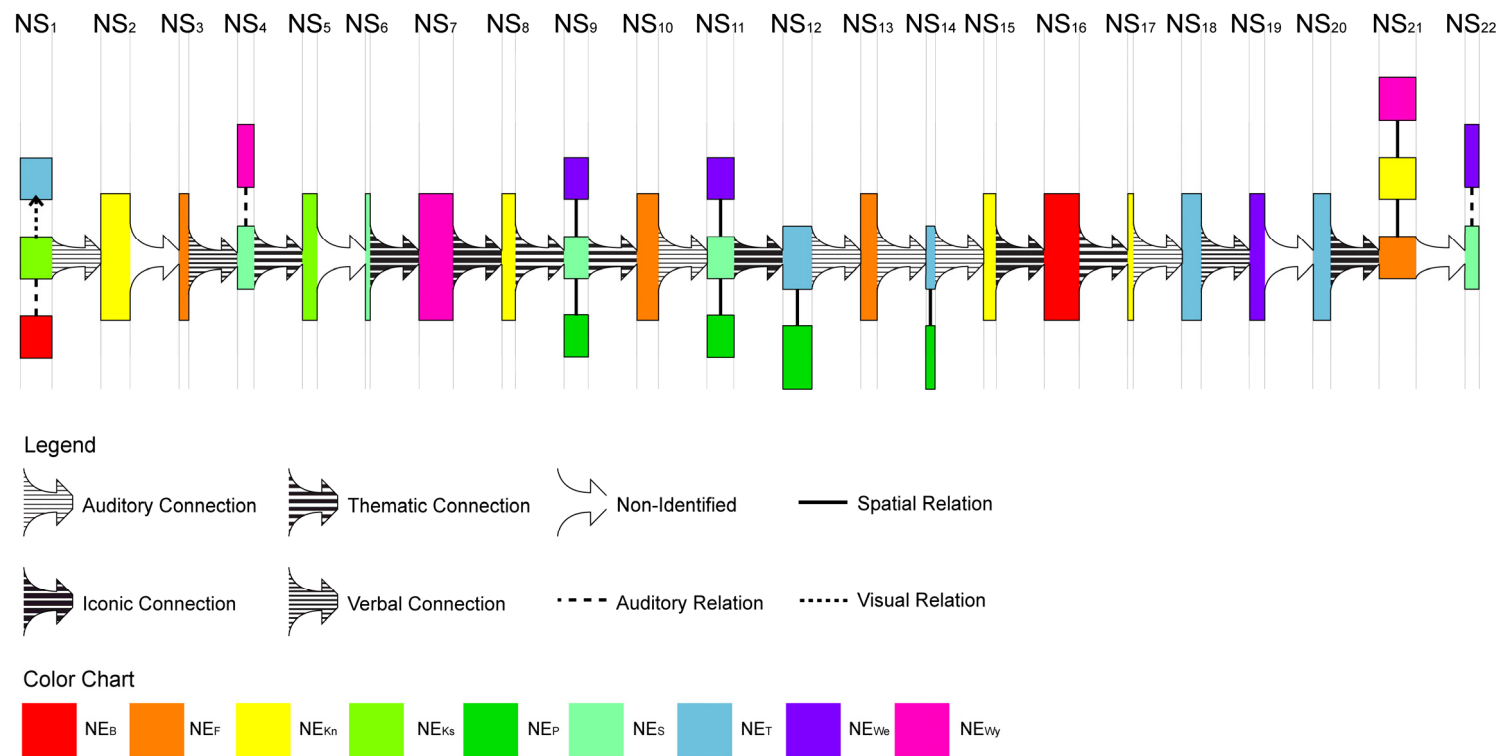


Figure 5.3 Inter-Segmental Connections (ISC) and Intra-Segmental Relations (ISR) Chart

The 22 NS portrayed here are those of the selected 30mins section (NS in the dotted rectangle from Figures 5.1 & 5.2).

Each column/NS is therefore numbered accordingly from 1 to 22.

The ISC are represented by hatched arrows since the segmental movement in SC (and any narrative film in general) is sequential and unidirectional.

The 3 other types of vertical lines represent the ISR.

In the cases where there are more than 1 NE in a single NS, the ISC arrows are assigned from one particular NE to another because during the inter-segmental passage the last and first images seen in the NS belong to those NE.

These ISC are repeated throughout the film in different forms, and in our extracted 30min section we distinguish 4 well-defined types of ISC, and 1 ill-defined:

AUDITORY CONNECTIONS

An auditory sign continues and lingers on from one NS to the following thus creating a connection on the Auditory level between them. These connections are found connecting NS₁/NS₂, NS₁₀/NS₁₁, NS₁₂/NS₁₃/NS₁₄/NS₁₅ and NS₁₇/NS₁₈ (Figures 5.4a to 5.4d).

In the case of NS₁₂ to NS₁₅, for example, a song sung by an Existent/character of NE_T begins in NS₁₂ and continues to be overheard (extradiegetically⁶) by the viewers all the way to NS₁₅, thus forming an Auditory connection between all these NS (Figure 5.4c).



Figure 5.4a Auditory Connection NS₁-NS₂

The sound of water splashing is heard in the last seconds of NS₁ (left), and then in the following NS₂ (right) the sound of the running river is heard.

NS₁ screenshot: 00:50:29

NS₂ screenshot: 00:50:30



Figure 5.4b Auditory Connection NS₁₀-NS₁₁

The telephone rings in NS₁₀ (left), and then few seconds later in NS₁₁ (right) the cash counter's bell is heard in the background.

NS₁₀ screenshot: 01:02:10

NS₁₁ screenshot: 01:02:13

⁶ Without affecting the progression of the story or the narrative Existents and Events.

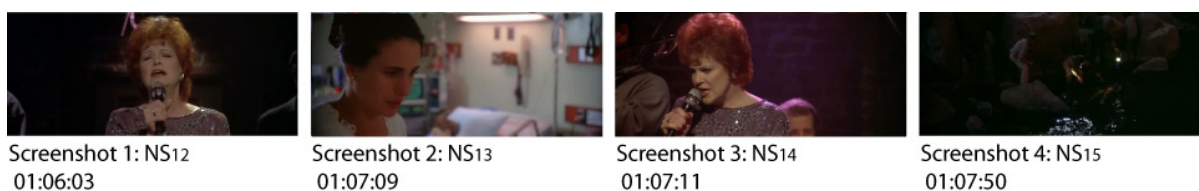


Figure 5.4c Auditory Connection NS₁₂-NS₁₅

The singing voice of Tess Trainer from NE_T in NS₁₂ (screenshot 1) continues to be heard in NS₁₃ (screenshots 2) although the NE also switched to NE_F where the actions are taking place in a completely different setting, then the film switches back to NE_T in NS₁₄ (screenshot 3) where Tess Trainer is still singing, and her voice continues to cross over to NS₁₅ (screenshot 4) and into NE₁₅₁.



Figure 5.4d Auditory Connection NS₁₇-NS₁₈

In the last seconds of NS₁₇ (left) the sound of cello is heard extradiegetically (only by the viewer) only to be discovered by the viewer that its source is the instrument played by Zoe Trainer of NE_T in following NS₁₈ (right).

NS₁₇ screenshot: 01:11:30

NS₁₈ screenshot: 01:11:31

ICONIC CONNECTIONS

At the beginning of a NS, an iconic sign (image sign, whatever its nature) directly refers back to an image (of different nature than the first) that had just appeared at the end of the previous NS, thus the final image of NS₆, NS₇, NS₁₁, NS₁₅ and NS₂₀ is visually echoed (respectively) in the first image of NS₇, NS₈, NS₁₂, NS₁₆ and NS₂₁ (Figure 5.3 and Figures 5.5a to 5.5e).



Figure 5.5a Iconic Connection NS₆-NS₇: Laughter

NS₆ screenshot (left): 00:56:41

NS₇ screenshot (right): 00:56:42



Figure 5.5b Iconic Connection NS₇-NS₈: Dominant Color

NS₇ screenshot (left): 00:58:01

NS₈ screenshot (right): 00:58:02



Figure 5.5c Iconic Connection NS₁₁-NS₁₂: Sunglasses & Toothpick

NS₁₁ screenshot (left): 01:04:00

NS₁₂ screenshot (right): 01:04:13



Figure 5.5d Iconic Connection NS₁₅-NS₁₆: Floating in Water

NS₁₅ screenshot (left): 01:08:41

NS₁₆ screenshot (right): 01:08:42



Figure 5.5e Iconic Connection NS₂₀-NS₂₁: Doors

NS₂₀ screenshot (left): 01:15:06

NS₂₁ screenshot (right): 01:15:07

THEMATIC CONNECTIONS

These connections are a little subtle to recognize as they distinguish types of transitions that are made by repeating a common theme from the end of one NS into the beginning of the following NS. These connections are present between NS₄/NS₅, NS₈/NS₉/NS₁₀ and NS₁₆/NS₁₇. We emphasize on considering these themes exclusively of visual nature (Figures 5.6a to 5.6d).



Figure 5.6a Thematic Connection NS₄-NS₅: Complaining Children

NS₄ screenshot (left): 00:54:18

NS₅ screenshot (right): 00:54:19



Figure 5.6b Thematic Connection NS₈-NS₉: Making Decisions around a Table

NS₈ screenshot (left): 00:58:58

NS₉ screenshot (right): 00:59:06



Figure 5.6c Thematic Connection NS₉-NS₁₀: Setting up Dates

NS₉ screenshot (left): 01:00:14

NS₁₀ screenshot (right): 01:00:47

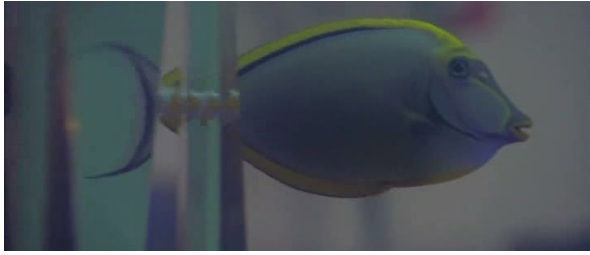


Figure 5.6d Thematic Connection NS₁₆-NS₁₇: Fish/Fishing

NS₁₆ screenshot (left): 01:11:05

NS₁₇ screenshot (right): 01:11:06

VERBAL CONNECTIONS

These connections are manifested by speech, when a specific word is pronounced at the end of one NS, a direct or indirect representation of that word is visually manifested at the beginning of the following NS (Figures 5.7a and 5.7b). These connections occur between NS₃/NS₄ (in NS₃ the word “telephone” is uttered by Howard Finnigan of NE_F, and then in NS₄ we actually see Sherri Shepard of NE_S talking on one) and NS₁₈/NS₁₉ (in NS₁₈ Zoe Trainer of NE_T asks her mother to talk to her about her deceased dad, and then in NS₁₉ the father of Chad Weathers of NE_{We} shows up at his window).

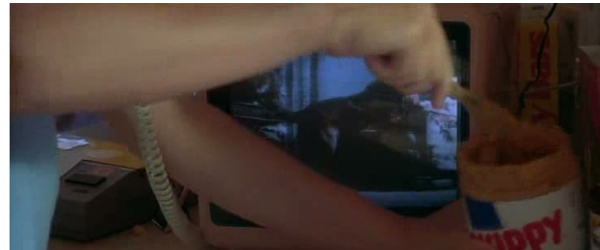


Figure 5.6a Verbal Connection NS₃-NS₄: Telephone

NS₃ screenshot (left): 00:52:44

NS₄ screenshot (right): 00:53:11



Figure 5.6b Verbal Connection NS₃-NS₄: Dad

NS₁₈ screenshot (left): 01:12:33

NS₁₉ screenshot (right): 01:12:52

NON-IDENTIFIED

When we were not able to clearly identify and classify the connection between 2 NS, we designated the connection as “Non-Identified”. This type of connections seems to be an exclusive use of film grammar, as the connection between the NS is done only on the syntactic level of film (via the clear-cut editing) without resorting to its semantic levels.

5.4. INTRA-SEGMENTAL RELATIONS

As mentioned earlier above in Section 5.1 there are instances in SC where Existents/characters from different NE interact with one another on different levels in the same NS. These interactions between Existents generate **Intra-Segmental Relations** or **ISR** between their corresponding NE; where the relations between the latter were manifested sequentially on the semantic and syntactic levels in the case of the ISC, the NE’s ISR are manifested almost simultaneously and on the semantic level, meaning that they occur purely in the diegetic realm of SC. Thus, since the diegetic world of the latter is extremely realistic and similar to our own real world, and since the Existents/characters are humans in nature, their interactions are therefore similar to the way we interact with each other, leading us to identify 3 types of ISR in our extracted 30min section:

AUDITORY RELATIONS

These are instances where characters of different NE, physically present in 2 different Existents/settings are diegetically connected to each other via a telephone conversation just like in NS₁, NS₄ and NS₂₂. In these segments we have one of the best examples of “alternating syntagmas”³⁾ where the shots go back and forth between 2 conversing characters at the end of each telephone line; although there are clear-cuts between each shot with a complete change of Existents (character, location, etc.) and the NE they represent, we can still consider that the entirety of the conversation belongs to a one and same NS since it is a simultaneous phenomenon almost literally linking both characters with a phone line, leading them to share a concurring Event (Figures 5.8a to 5.8c).



Figure 5.8a Auditory Relations NE_{Ks} and NE_B in NS₁



Figure 5.8b Auditory Relations NE_S and NE_{Wy} in NS_4



Figure 5.8c Auditory Relations NE_{We} and NE_S in NS_{22}

SPATIAL RELATIONS

These relations manifested in NS_9 , NS_{11} , NS_{12} , NS_{14} and NS_{21} , occur when characters from different NE happen to be present in the same Existent/setting at the same time. Whether the existence of one is on-screen or off-screen (when only the voice is heard) is irrelevant, since they are simultaneously sharing the same space (Figures 5.9a to 5.9c).



Figure 5.9a Spatial Relations: NE_{We} , NE_S and NE_P in NS_9 (left) and NS_{11} (right)



Figure 5.9b Spatial Relations: NE_T and NE_P in NS_{12} (top) and NS_{14} (bottom)



Figure 5.9c Spatial Relations: NE_F , NE_{Kn} and NE_{Wy} in NS_{21}

VISUAL RELATIONS

These relations depict characters of different NE's more or less in different Diegetic Spaces watching/looking at each other. We consider this relation directional since a character could be watching/looking at the other without the other being aware of it, just like the manifestation in NS_1 where the character from NE_{Ks} is discretely watching the character from NE_T through the fence (Figure 5.10).



Figure 5.10 Visual Relations: NE_{Ks} and NE_T in NS_1

5.5. SYNTHESIS

We summarize Sections 5.2, 5.3 and 5.4 in diagrammatic form in Figure 11, and interpret them as follows:

- While jumping from one NS to another consecutive one, intra-diegetic elements are used in both in order to curb the disorienting impact of this sudden break in the narrative and diegetic flows, and bridge the cut between them (ISC, Figure 5.11, top);
- The diversity of these ISC (5 types in total) reflects and follows the diversity of the content and form of SC that contains 9 different individual stories with dozens of corresponding Existents (characters and settings) and Events related to them.
- Inside a single NS, multiple Existents derived from different NE can be co-present (on-screen or off-screen) either in the same syntagmas, thus more immediate ISR being generated between them (Figure 5.11, bottom right), or in different syntagmas where their ISR would be punctuated with syntactic cuts (Figure 5.11, bottom left);

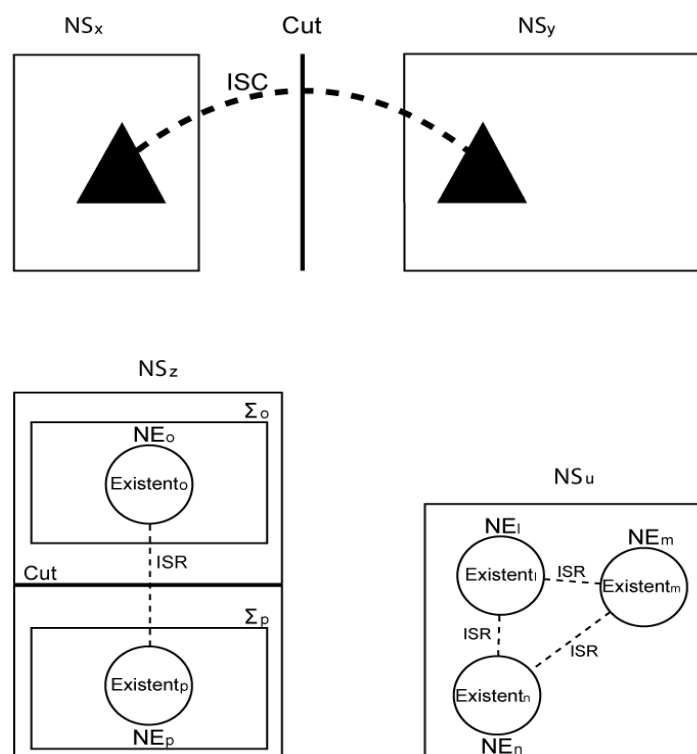


Figure 5.11 Generalized diagrammatic forms of Inter-Segmental Connections ISC (top) and Intra-Segmental Relations, ISR (bottom)

Top: intra-diegetic elements (illustrated here by a black triangle) in a random NS_x are repeated or echoed in one form or another in a NS_y thus bridging the clear-cut.

Bottom Left: Existents belonging to random NE_o and NE_p , and situated in different syntagmas (Σ_o and Σ_p) but the same NS_z , are in ISR with each other.

Bottom Right: Existents belonging to random NE_l , NE_m and NE_n and situated in a single random NS_u are in direct ISR with each other.

- Without the ISR, we conclude, there cannot be any overlapping of NE in SC or even in any narrative film with multiple narratives since it is inconceivable to apprehend the presence of different Existents or NE in a NS without audio-visual, intra-diegetic elements.

SC is thus a highly complex and finely detailed filmic experience that stimulates its viewers on many levels of significance making full use of available syntactic and semantic tools.

5.6. ARCHITECTURAL INTERPRETATIONS

Synthesizing what we have learned up till now from our theoretical work⁷, and most importantly, from RA's analysis⁸ and that of SC's (above in Section 5.5), we reach to the following interpretations regarding the analogies of film in architecture:

1. **Segment** is analogous to **Space**

Narrative is analogous to **Primary Function**,

Thus **Narrative Segment (NS)** is analogous to **Functional Space (FS)**;

2. **NS** are connected to consecutive **NS** via **ISC (Inter-Segmental Connections)**;
3. Thus **FS** are connected to consecutive **FS** via consecutive **Inter-Spatial Connections (ISpC)**.
4. **Existents** are elements "populating" a Diegetic World, contained in **NS**, and affected by and/or generating **Events**;

Thus, **Existents** are analogous to **Architectonic Functional Elements**⁹ "populating" a Spatial Organization, contained in a **FS**, and generating, or are the consequence of, architectural **Events, Happenings** or **Program**¹⁰.

5. **Narrative Entities (NE)** are relatively autonomous/self-contained sections of a larger single **Narrative**, and are divided into or distributed into smaller **NS**;

Thus **NE** are analogous to **Functional Aggregates (FA)** of smaller **FS** (and Non-Functional Spaces);

⁷ Ref. Chapter 2 and Chapter 3.

⁸ Ref. Chapter 4.5.

⁹ We consider "Architectonic Element" any object belonging to the built environment.

¹⁰ Tschumi Bernard, *Architecture and Disjunction*, MIT Press, 1996.

6. Different **Existents** representing different **NE**, and located in the same **NS**, enter in specific **Intra-Segmental Relations (ISR)** with each other;

Thus by analogy, differential **Architectonic Functional Elements** belonging to different Programmatic categories and located in the same **FS** enter in specific **Intra-Spatial Relations (ISpR)** with each other.

7. Finally, since **ISC** and **ISR** are respectively analogous to **ISpC** and **ISpR**, then their corresponding natures and types are also analogous. We expand on this point here below.

In architectural reality, since programmatic sequentiality is not a constant critical need or must, we interpret the Sequential ISC and the ISR in a Non-Sequential manner (Figures 5.12 and 5.13) based on Figure 5.3 and taking into consideration the following factors: all the NS are grouped in their own corresponding NE; the NE are linked together in the manner of a digraph where the sequentiality between the NS is interpreted as directionality between their corresponding NE; the directional arcs between the NE thus represent the actual ISC and ISR of Figure 5.3.

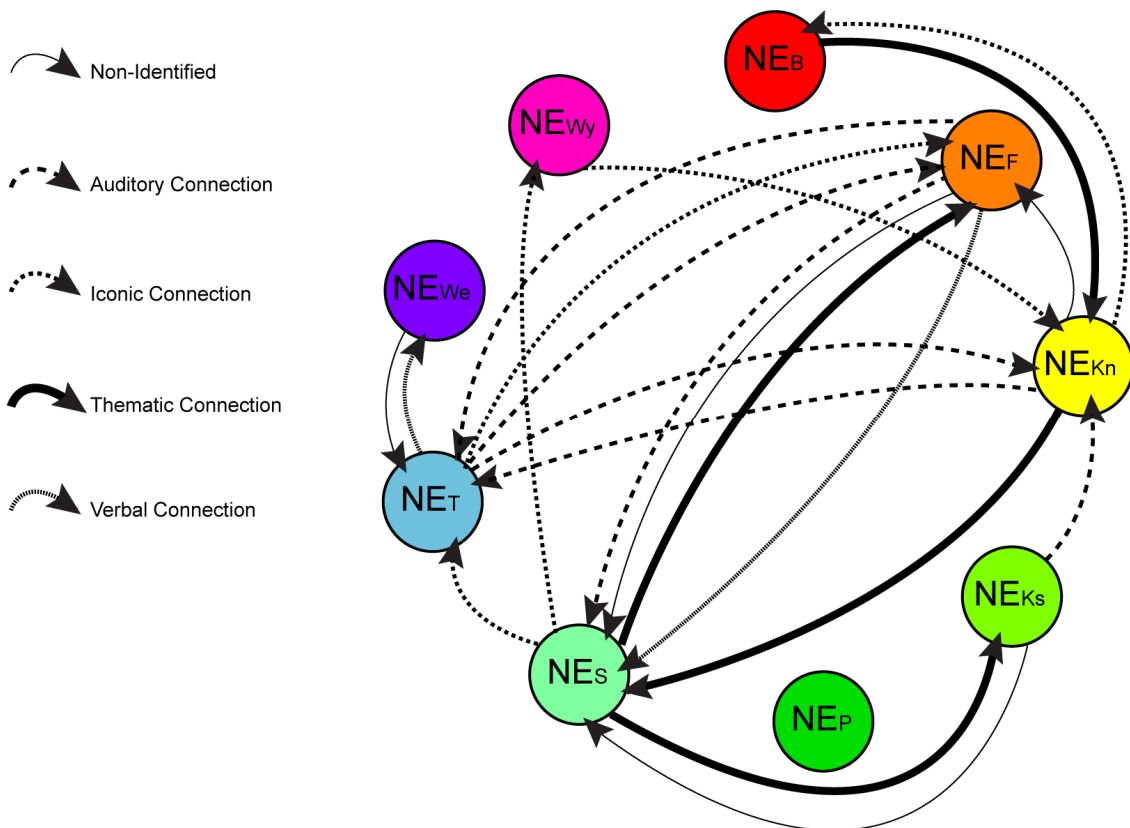


Figure 5.12 Non-Sequential Inter-Segmental Connections

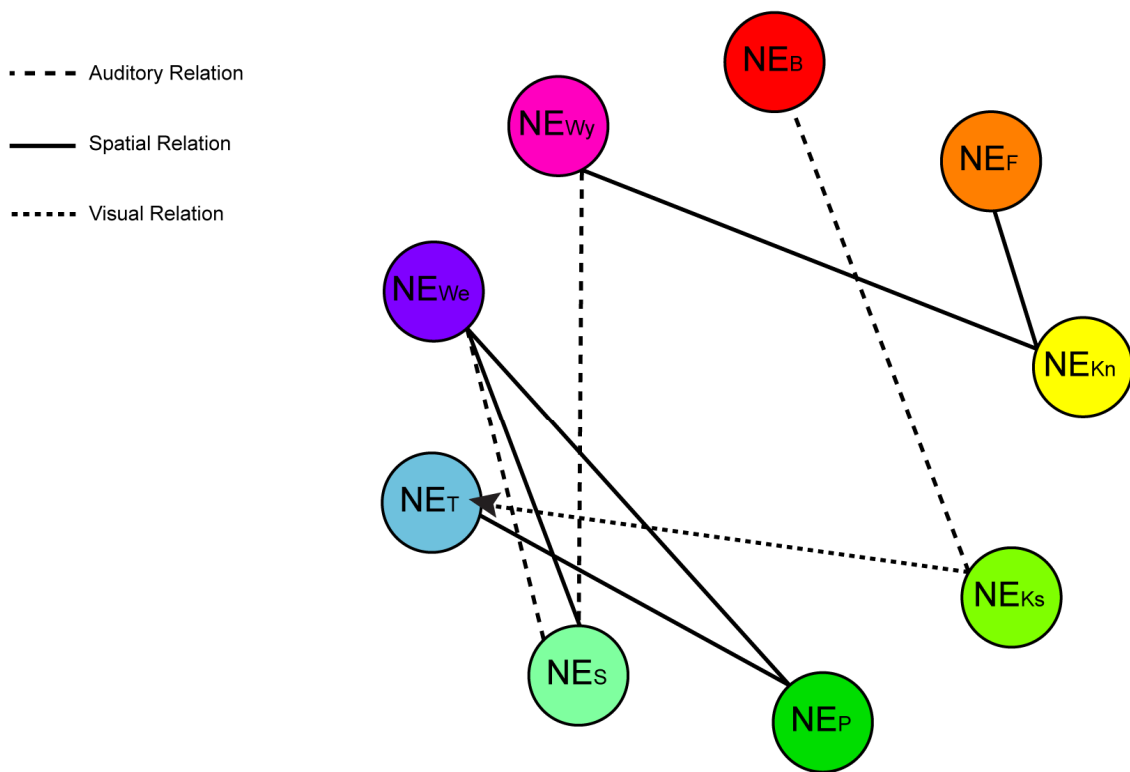


Figure 5.13 Non-Sequential Intra-Segmental Relations

Following this logic and based on the Architectural Interpretations reached above, by replacing all the NE (and the NS) in these 3 digraphs with their analogous architectonic counterparts, i.e. the FA (and FS), the ISC and the ISR would thus also be replaced by their own architectonic counterparts, i.e. the ISpC and ISpR. And so, the total narrative/segmental connectional/relational abstract complexities that exist in narrative films in general, and SC in particular, become interpreted as an architectural conceptual diagram of functional/spatial connectional/relational complexities (Figure 5.14).

Figure 5.14 is then a hypothetical diagram where we imagine the NE in SC are reflected architectonically in the manner of corresponding FA. In this situation then also, the ISpC and ISpR irrevocably reflect their exact filmic counterparts but of course expressed in an architectonic manner, for example: NE_{Kn} and NE_T become reflected in the form of 2 Functional Aggregates whose interactions and relations would reflect those of the former; such as the Auditory Connection directed from NE_{Kn} to NE_T becomes similarly architectonically reflected as a directional Auditory Connection connecting a certain FA_{Kn} to a certain FA_T (Figure 5.14), where the architectonic directionality of the latter connection can be manifested as certain noises/voices emanating FA_{Kn} are only heard in FA_T (but not vice versa).

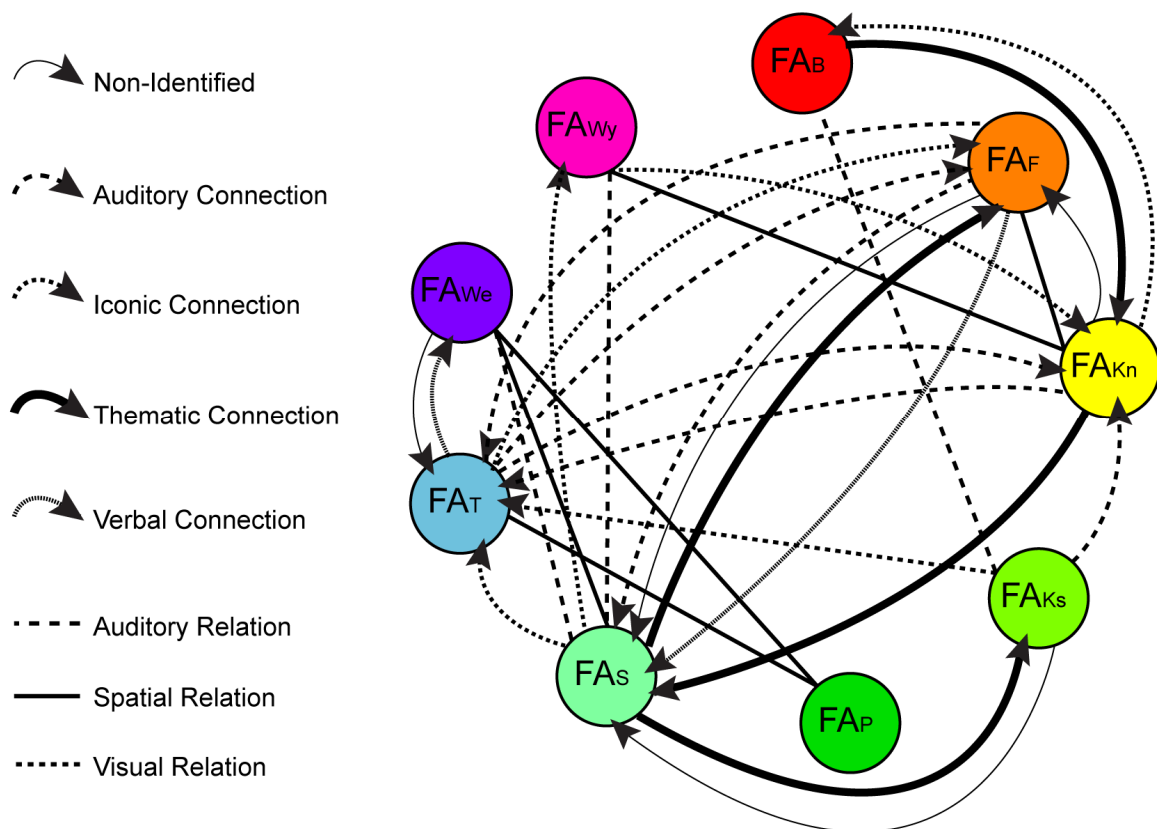


Figure 5.14 Architectural Conceptual Diagram of Functional/Spatial Connectional/Relational Complexities

5.7. PRELIMINARY FILM-ARCHITECTURE ANALOGY DERIVATION DIAGRAM

We organize and place all of the above interpretations in the *Film-Architecture Analogy Derivation Diagram*, or **FAADD** (Figure 5.15), where the multiple elements that constitute narrative film face their analogous architectural counterparts.

Also based on what we learned in Chapter 3.4 regarding the structuring levels of the Architectonics of Narrative Film¹¹, we distinguish more generic elements that exist on the macrostructural level, and refer to them as **Components**, and place them on the more peripheral columns of the FAADD; the elements that are less generic exist on the microstructural level, we refer to them as **Sub-Components**, and place them in more internal columns.

¹¹ We have to note that in this new FAADD below, we have changed the location of Syntagmas from the Sub-Components level as depicted in Figure 3.1, to the Components level. We did so in order to simplify the FAADD as it grows higher in complexity, and render more accessible to designers.

Finally, it is important to note that the FAADD is not to be taken as a strict and closed “conversion chart” where film elements are equal to architectural ones, it should rather be considered as being more of a general and open interpretation guidelines. This is due to the fact that, at this stage, we still consider the FAADD as a “preliminary diagram”, because we are leaving the door open for possible evolutions and enhancements, as its full potential for usage in actual design processes will be tested in the following chapter.

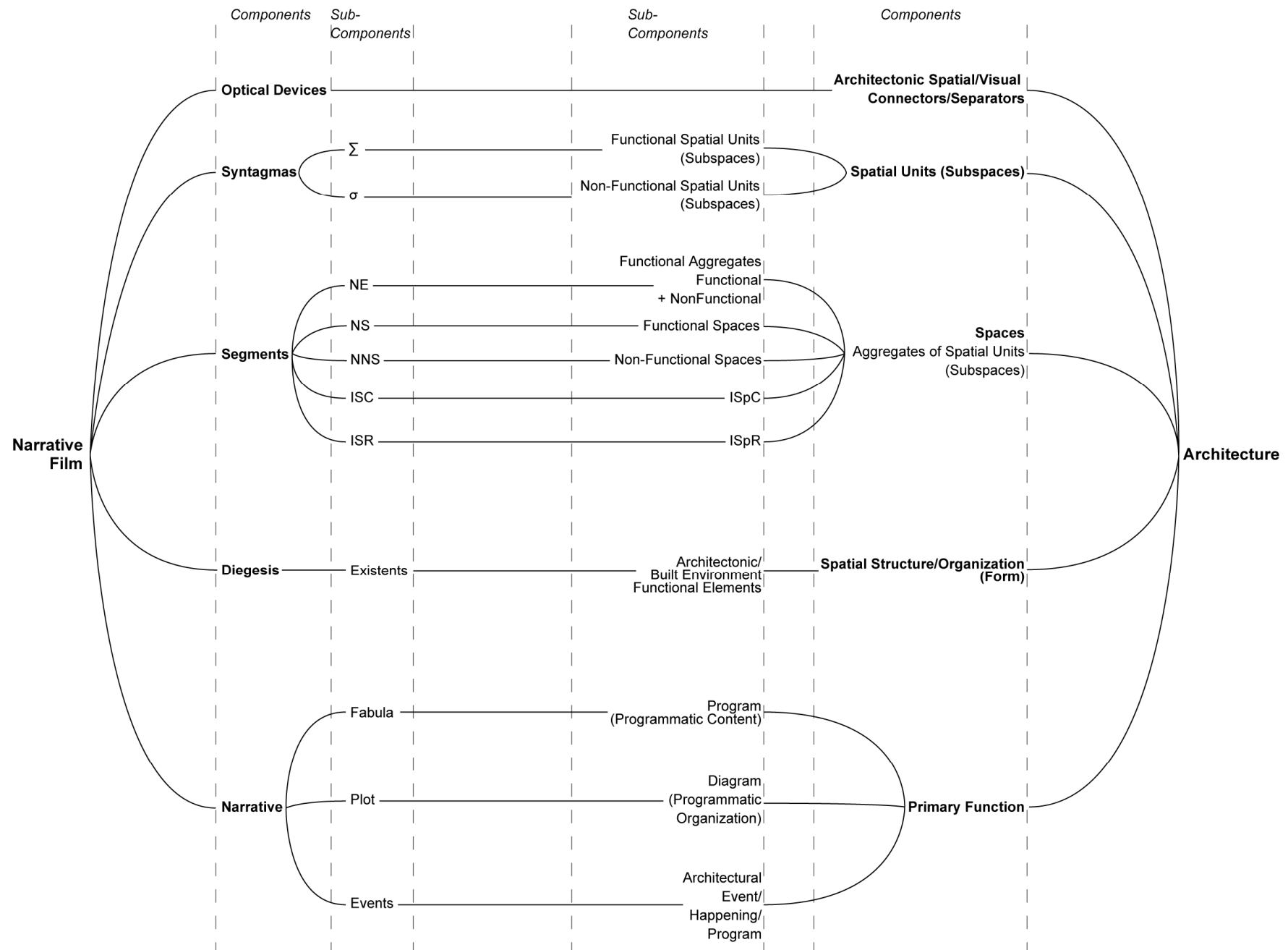


Figure 5.15 Preliminary Film-Architecture Analogy Derivation Diagram (FAADD)

COMPLEMENTARY SECTION: ANALOGY INTERPRETATION POSSIBILITIES 2

CASE STUDY OF *SHORT CUTS* AND KITAKAMI SAKURA HALL

In this complementary section, just as the Complementary Section 1 from Chapter 4, we conduct a brief analysis on the semiotic, spatial and functional properties of the Kitakami *Sakura Hall* cultural exchange center as a way to illustrate the possible architectonic interpretations of the analogy conclusions reached above in Sections 5.6 and 5.7.

CS.2.1. ABOUT KITAKAMI SAKURA HALL

Kitakami *Sakura Hall*, or **KSH** (Figure 5.16), is designed by *Hideyo Noguchi (Kume Sekkei)* the winner of the 2006 *Architectural Institute of Japan Prize*. Its main program is a cultural exchange center, and it contains around 24 rental spaces for performance/artistic/individual activities, designated as the Art Factory Units (**AFUs**), a large and a medium sized music/theater halls, a café, administration offices, etc.



Figure 5.16 Bird's eye view of Kitakami Sakura Hall

Image courtesy of: Kume Sekkei.

Its site area is 32,191m², construction area is 9,834 m², and total floor area is 15,093 m². The construction materials are limited to concrete, steel, glass, and wood floorings, and the building has very large open internal spaces that receive direct sunlight from skylights and the glass south façade.

CS.2.2. SPATIAL/FUNCTIONAL PSEUDO-INDEPENDENCE AND CONNECTIVITY

In architectural terms, and in the general the spatial structure of KSH, the 24 AFUs, are easily recognizable as distinct individual units with clear architectonic boundaries (Figure 5.17); hence the parallel between the distinct, recognizable, pseudo-independent units of SC (i.e. its NS and/or NE) and the AFUs, contained in, and spatially and functionally distinguishable from their

larger containing entity, KSH (Figure 5.18): just as the NS in SC have their own temporal filmic boundaries, the AFUs in KSH are also delimited by their own distinct architectonic ones.



Figure 5.17 Internal view of Kitakami Sakura Hall

In both pictures the individual AFUs are seen to be detached from the main general volume as they are delimited by their own individual architectonic boundaries.

Images courtesy of the author.

And so, following the same logic as above, the architectural parallels of SC's ISC and ISR can be found illustrated in KSH in the form of its “visibility network”¹² connecting its AFUs: the latter's users are either seen or unseen by other AFU users, depending on their mutual positions inside a unit, and their viewing angles through its glass panels. Being seen by and/or seeing another user while conducting certain activities in the AFUs, encompasses different spatial experiences, creating, for the very least, visual interactions between the parties involved. Therefore, in the case of KSH, we specify 2 types of interactions/connections occurring between the individual AFUs (Figure 5.19):

1. Focal Visual Connection: when a user placed in the center of an AFU is capable of seeing, hence visually interacting with another AFU user (also positioned in its center).
2. Peripheral Visual Connection: when a user in the center of an AFU is not capable of seeing, hence visually interacting, with another AFU user. In this case a user can only see the periphery/volume of the other AFU.

We could consider these 2 connections in KSH as simple examples of architectural visual connectivity illustrating a Visual Relation ISR exposed earlier in SC, since both the latter and former are 1) “Visual” properties and 2) Directional in nature.

¹² The expression “visibility network” was used by the Mr. Noguchi during a conversation we had with him in Autumn 2009 while on a visit to KSH together.



Figure 5.18 Second Floor Plan (top) and Longitudinal Section (bottom) of Kitakami *Sakura Hall*

The AFUs are distinguishable as pseudo-independent units (in orange) contained in a larger architectonic entity.

Original CAD data courtesy of: Kume Sekkei.

Colors and dashed lines added by the author.



Figure 5.19 Focal (left) and Peripheral (right) Visual Connections diagrams

Left: direct visual connections that exist between the different AFU users. Right: a user can only see the external volume of linked AFU.

Original CAD data courtesy of: Kume Sekkei.

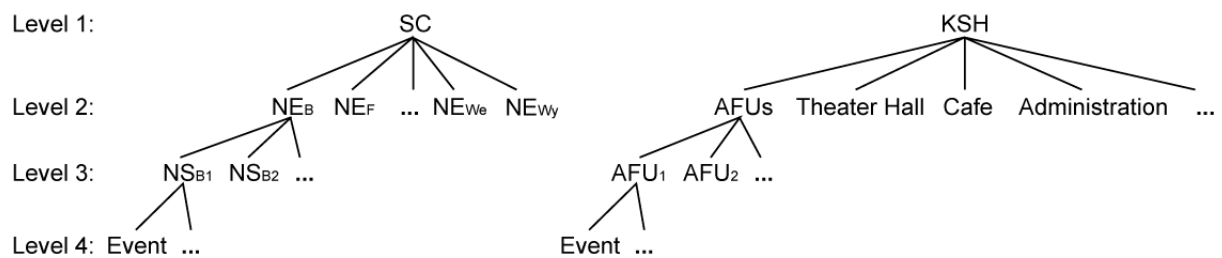
Colors and dashed lines added by the author.

CS.2.3. ARCHITECTONIC PROGRAMMATIC MULTI-LEVELING

As mentioned earlier, KSH is a cultural exchange center (first level of functional significance), containing AFUs, theater halls, offices, a café, amenities, etc. (second level of functional significance); and thus in turn, the functional spaces composing each of those latter components, for example each individual AFU that forms the total group of AFUs, exist on a third level of functional significance. Now focusing solely on the AFUs at this stage, we notice that particular users modify the functional perception of these spaces depending on the type of activities they practice in them; therefore we consider that the spatial appropriation of users (architectural Events) adds an additional fourth level of functional significance to KSH (Figure 5.20).

This fourth level in constant change renders the programmatic structure of the AFUs highly unstable (Figure 5.21): a stable state is only achieved when either all of the AFUs are vacant of users, or all of their users are simultaneously practicing the same activity. This perception of a

spatial structure with an ever-changing program is therefore similar to the perception of the narrative structure of SC: the viewers/users have to constantly put the structural components of these artistic entities (NS v/s NS and AFU v/s AFU) in relation between each other and simultaneously in relation to themselves in their former/current/ future states. This similarity implies that the significance of NE is comparable to the second level in KSH (e.g. AFUs), NS to the third level, and the Narrative Events corresponding to the fourth level of Architectural Events in KSH (the temporary uses of the AFUs).



CS.2 Figure 5.20 Levels of significance in Short Cuts and Kitakami Sakura Hall



Figure 5.21 Different AFU architectural Events scenarios

*Original CAD data courtesy of: Kume Sekkei.
Colors and text added by the author.*

In this Complementary Section 2, we have given brief examples of architectural interpretational possibilities of the filmic notions of ISC/ISR, and also illustrated in architectural parallels the multileveled properties of a complex multi-narrative film such as SC.

We remind again though, that the analogy interpretation possibilities exposed here and earlier in Chapter 4, are based on pre-existing architectural entities whose original conceptions have absolutely no relations whatsoever with the corresponding films we put them in relation to. That is why we consider these examples as very basic and primitive interpretations possibilities not to be pondered upon too deeply.

On the other hand, in the following Chapter 6, we actually do start developing more “realistic” and truer examples and illustrations of architectural interpretation possibilities of narrative film notions in the course of the *Extended Cinematics* workshop.

CHAPTER 6
EXTENDED CINEMATICS
DESIGN APPLICATIONS

6.1. INTRODUCTION

During our 2010 summer holidays visiting our native country of Lebanon, we had given a concise presentation in the Holy Spirit University of Kaslik (HSUK) about our current doctoral research in Kyoto University. The presentation was at the request of the Dean of the Fine and Applied Arts of HSUK, who had also attended it. Following the success of this presentation, and in response to the interest expressed by the attendees, we were once more invited to organize, this time, an intense weeklong workshop revolving mainly around our research themes.

We regarded this workshop as an opportunity to implement and experiment with the architectural design process we are developing, and use its results to further advance our research and support our hypotheses. Thus based on the working title of our thesis, we entitled the workshop *Extended Cinematics: A Design Process Based on Architectural Interpretations of Narrative Film Structures*. It took place during the third week of March 2011, from the 14th to the 18th; and 8 architecture students in total took part in it (four 5th year students, and four 6th year students).

6.2. WORKSHOP OVERVIEW

6.2.1 OBJECTIVES AND PURPOSES

The *Extended Cinematics Workshop* had taken place in a university and country other than Kyoto University in Japan; and in order to receive proper logistic and additional financial support from the Dean of the Faculty of Fine and Applied Arts of HSUK, we needed to provide him with student-centered incentives. Thus the first objectives for conducting the Workshop was to give the participants basic notions on film and architecture semiotics, train them “to read” film from a structuralist semio-linguistic approach, and, stimulate them into acquiring a new architectural design process. After acquiring the above basic film analysis skills, the participants were required to conduct group level analyses on two films and derive from them individual architectural designs, thus fulfilling our second objectives for the Workshop: collecting an as large as possible sample of architecture designs using a specific film as source, hence obtaining concrete examples of the possibilities of architectural design using our *Extended Cinematics Process*.

The objectives met above were the outcome of our initial purposes for accepting the Dean’s invitation to organize our Workshop. While developing the theoretical aspects of the *Extended Cinematics*, we had come to a conviction that concrete applications of our hypotheses were a necessity in order to anchor them to reality and render our process applicable in design

practices. In consequence, a feasibility study was our first purpose for holding the Workshop: it was central for our research to see if it was possible to achieve architectural design based on the deeper structures of Narrative Film following one of our fundamental research hypotheses. We also believed that it would also be very important to complement this feasibility study with a thorough survey on the variety of designs that could derive from a single initial film, and if the similarities between them could be traced back to the latter. Finally, by using two case study films to originate designs from, we were curious to investigate the possibilities of tracing back the differences between these designs to their film sources.

6.2.2. WORKSHOP CONTENTS DESCRIPTION

The *Extended Cinematics Workshop* lasted 5 days in total and was divided into 3 main phases of one and a half days on average each. The following 3 subsections are detailed descriptions of those phases.

PHASE 1: THEORETICAL BACKGROUND AND FILM SCREENINGS (DAYS 1&2)

Since the participants were 5th and 6th year architecture students, they were unfamiliar with most of the theoretical contents of our research, specifically the fields of semiotics and film studies. Moreover in order for them to apprehend the full potential, and properly follow the logic of the *Extended Cinematics Process* (which would allow them to appropriately analyze a narrative film and generate architecture based on it), we were bound to give them at least some minimal and necessary background information in the form of lectures during the first 2 days. Thus, Phase 1 was organized and offered within 4 main lectures:

Lecture 1, Semiotics and Structuralism: We introduced brief definitions of semiotics and structuralist theories and philosophies to the participants. Since the core subjects of our theoretical background revolved around film and architecture semiotics, and structuralist analysis of narrative films, we found it a natural need to introduce to participants the origins of those notions.

Lecture 2, Film Semiotics: We started by presenting a concise history of film and cinema, reaching to the more contemporary and comprehensible definitions of film. This was followed by different structuralist theories on the subject of Elementary Units of film structures. The lecture was concluded with our synthesis of the latter theories in the form of a constructed model that we refer to as “the Architectonics of Narrative Film”.

Lecture 3, Architecture Semiotics: Following the same logic as above, we introduced Donald Preziosi’s *Semiotics of the Built Environment*¹⁾ as it classifies the built environment from its

smallest units of comprehension to the largest. And finally, based on Eco's works, the interrelations of Form, Function and Sign²⁾ were debated.

Lecture 4, Narrative Structures in Film: In this final lecture, we introduced structuralist and formalist definitions and approaches to Narrative, leading us then to expand on the notions of what we refer to as "Architectonics of Narrative" and its various components: Plot/Syuzhet, Story/Fabula, Discourse Space/Time and Events. We closed the lecture with the definition of Diegesis and its "Architectonics" (notions of diegetic space/time).

During this Phase 1, we screened one case study film at the end of each day, hence 2 in total: *Russian Ark* (day 1), and *Short Cuts* (day 2). Both of these films were the subjects of our own personal analyses until that point, and during the Workshop they were the cases the participants were to analyze and derive specific architectural designs from. It is important to note however, that while the participants knew beforehand they were to watch both films, they did not know yet which of both nor what design topic they would be designated to derive architectural designs from in the Individual Design Phase.

PHASE 2: GROUP ANALYSIS (DAYS 3&4)

Before starting with their group analyses, the participants had no experience whatsoever in film analysis; thus we started Phase 2 by presenting our own analytical works conducted on the above films. The purpose of presenting these works was to give a general example of a structuralist film analysis process suited for architects, and for the participants to base their own analyses on.

The first of our 2 presented works was the case study of *Russian Ark* (RA), where we conducted a thorough structuralist semio-linguistic analysis of the film and uncovered preliminary analogies between filmic and architectonic elements. As for the second case study of *Short Cuts* (SC), we had used structuralist semio-linguistics in a slightly different approach to the first one, and continued developing the film-architecture analogies by constructing a referential "Film to Architecture Conversion Table"¹. This Conversion Table was used as the backbone for all the following analytical and design studies in the workshop.

At this stage the participants were asked to use both of these case studies' results as references and starting points for their own group analytical works.

¹ Douzjian, Richard, Monnai, Teruyuki, From Film to Architecture: Toward a Design Methodology for Architectural Interpretations of Narrative Film, *DesignEd Asia Conference Proceedings*, 2010.

And so, the participants were divided by means of lottery into 2 equal groups of 4, each based on the above 2 films (Figure 6.1). Thus each group consisted of 4 participants and 1 film. The group having RA as case study was designated as Group 1; and the one having to work on SC, Group 2. The participants were asked then to analyze the designated films as coherent groups, not excluding any member's ideas, and making use of all the previous information we had provided them with, while keeping in mind that the results of their analyses would later be used in architectural design.

PHASE 3: INDIVIDUAL DESIGN (DAYS 4&5)

Since Phase 3 consisted of participants designing on the individual level, we organized another lottery where each of them ended up with a random architectural design topic. The total number of topics was 4, and they were: Shopping Mall, Residential Complex, Cultural Center and Ferry Terminal. The lottery was organized in such a manner that the 4 topics were unique to every participant in a single group, while those in the other one had the exact same. This resulted in obtaining 8 individual architectural designs, derived from 4 different topics, and 2 films (Figure 6.2).



Figure 6.1 Group Distribution in Phase 2

The 8 participants are seen here, during Phase 2, divided into 2 groups of 4 based on their assigned films, Group1, analyzing *Russian Ark* (left, in the background), and Group2, analyzing *Short Cuts* (right, in the foreground).

In order to further constrain the parameters of differentiation between the 8 participants and add more realism to their designs, we provided them with a single architectural site to insert their projects in. The site in question was a 50x100m rectangle by the Mediterranean Sea (Figure 6.3). Due to limitations in time (only one and a half days to complete their designs and present their works), the students were asked to focus more on the process of generating form and space rather than providing a well-polished design without any justifications in regards to the film. By complying with our instructions, the participants put down all their thoughts on their processes and design intentions on their presentation boards in as much detail as possible. Finally, having developed their designs in the allowed time frame, all the participants but one², presented their individual finished works during an open-public presentation session at the end of day 5 of the Workshop.

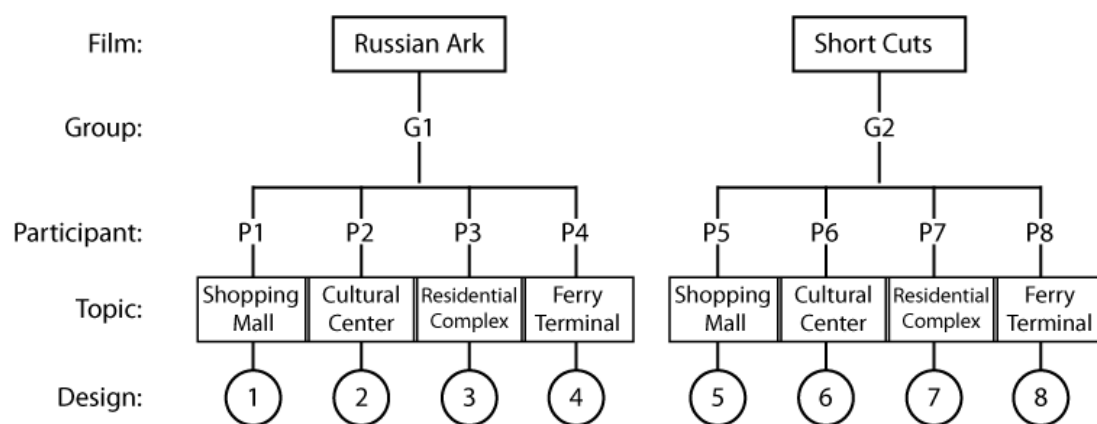


Figure 6.2 Design Distribution Diagram

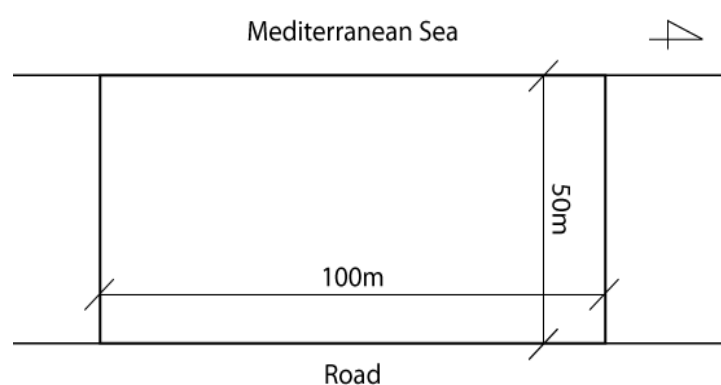


Figure 6.3 Site of Phase 3's Architectural Design Exercise

² Due to personal urgent matters Participant 8 had to leave the presentations session before his turn had come up. In consequence, Participant 8 had sent us by e-mail a description of his design intentions and process. However, the text he had sent was detailed/developed enough for a full and detailed understanding of his designs.

6.3. GROUP ANALYSIS RESULTS OVERVIEW

The group analysis was held to familiarize the participants with the details of their case study films and train them to conduct structuralist semio-linguistic film analysis. They were also asked to focus on their group's film and not stray into generalities. We were not anticipating any important analytical results from the participants' analyses since this was their first attempt ever to conduct such a study.

GROUP 1 – RA

However, there was an unexpected important finding that was made by Group 1 during their study of RA; 2 group members later used this finding in their individual architectural designs. During the first day of this phase, the Group 1 members were still trying to understand and fully assimilate everything that had been presented to them at that point; therefore the important analytical progress they had made was during the second day and final day of the phase. The noteworthy finding they had made was about Pier Paolo Pasolini's concept of film "Im-Signs": Group 1's interpretation of his concepts came as a reaction to the lack of conventional editing and segmentation in RA. As we had demonstrated to them right before starting with this phase, RA was unconventionally structured making use of its Characters and the Architectonic Structure it was shot in (the Hermitage Museum in St. Petersburg, Russia), namely its Diegetic Components; moreover, the smallest units of meaning in RA, the Narrative Syntagmas (Σ) were then also dependent on those components. And Σ , according to our own demonstrations were analogous to Spatial Units in Architecture (subspaces of a larger single Space). Our surprise was that Group 1 making use of all this information came to the conclusion that the individual Characters and Architectonic Elements in RA were similar to, if not the actual Im-Signs (Figure 6.3); additionally, they had concluded that the latter were analogous to "Spa-Signs", the Absolute Minimal Architectonic Elements that would define a coherent space. These Minimal Architectonic Elements were later interpreted by Participant 3 (seen further below in the Design Summary of P3) as being similar to Planes, which according to the De Stijl movement are the basic and primary elements that compose a three-dimensional space.

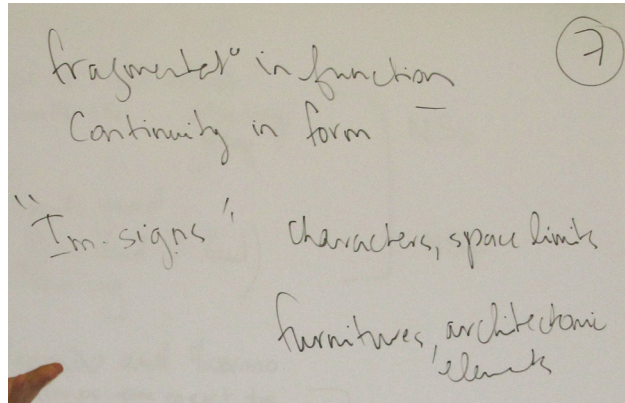


Figure 6.3 Group1's Major Findings Related to the "Im-Signs"

The cropped image reads: "Im-Signs" Characters, Space Limits, Furniture, Architectonic Elements.

And it was further clarified during the presentation session as: "Im-Signs are defined as the Characters and Space Limits in *Russian Ark*, and they are Analogous to Furniture and Architectonic Elements in the Actual Architectural World".

Image cropped from photo of Group1's original presentation board #7.

GROUP2 – SC

Concerning Group 2 and their study of SC, the analytical results were actually more descriptive than analytical, not containing any actual new information. However, there were 2 points (Figure 6.4) that although seemed irrelevant at first in this phase, turned out to be important while analyzing Group 2's individual designs: the first point was their identification of the 2 Major Narrative Events that occur in the beginning and ending of the film, and are common to all 9 Narrative Entities or NE; the second point is their identification of the existence and importance of Open Narratives (stories that don't have a clear ending, and leave the door open for individual interpretations) in SC. The relevance of these 2 points was perceived during Phase 3, because all 4 members of Group 2 used both points in their designs, all the while each one of them having completely different architectural interpretations for them (see further below in the Design Summaries of P5-P6-P7-P8).

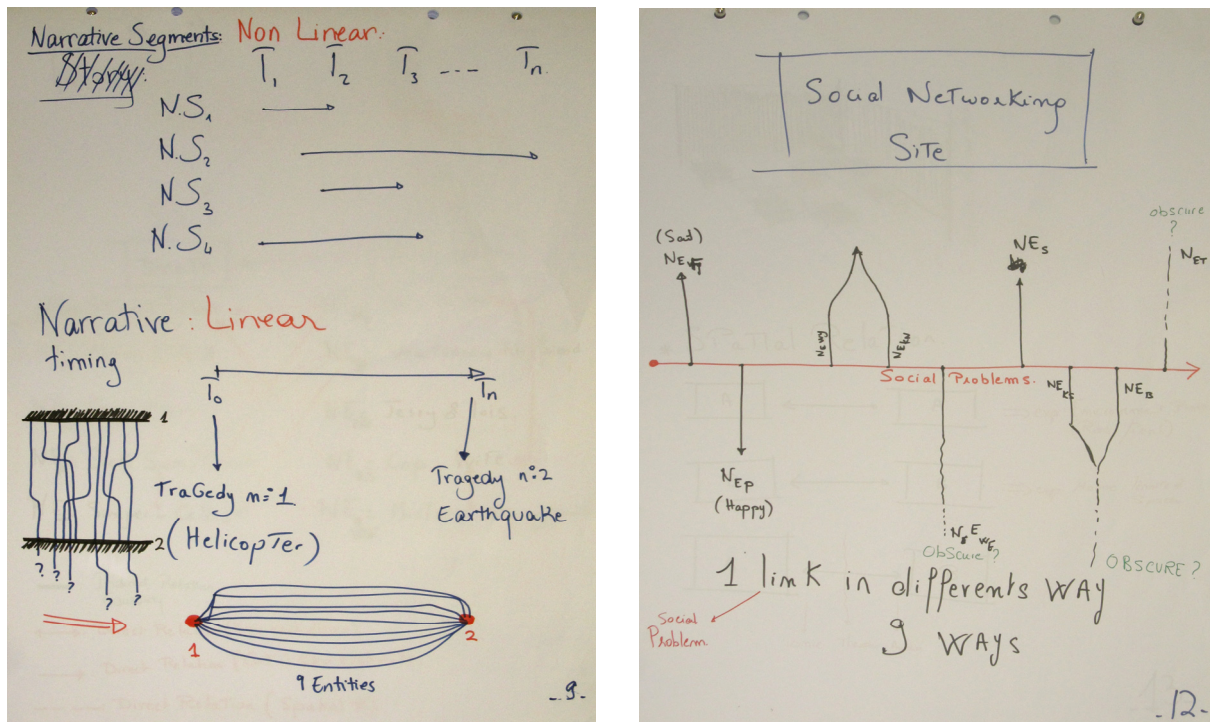


Figure 6.4 Group2's 2 Important Identifications: the 2 Major Narrative Events (left), and the Open Narratives of some NE (right)

The 2 Major Narrative Events are recognized to be common to all NE, and the importance of the 2nd one is also acknowledged as being either the point of narrative closure to some NE, or the point after which the narratives of some NE stay open, hence the point beyond which Open Narratives come to exist.

Images are photos of Group2's original presentation boards #9 & 12.

6.4. INDIVIDUAL DESIGN PROCESSES

Having concluded the workshop and collected all of the participants' design boards, we thus proceed with our own personal work, which consists of thoroughly analyzing the designs, and more specifically, mapping the transformation process of each of the 2 films into specific architectures.

We use the generic FAADD (Figure 5.15) as a primary canvas to be filled with 1) the Film-Specific Properties (**FSP**) of RA and SC as they were interpreted and understood by each and every participant, 2) the architectural designs referring to the afore-mentioned FSP and conceived by each participant, 3) and the Topic-Specific Properties (**TSP**) that stand for the architectural interpretations of each FSP made by each participant.

We repeat this act of filling the FAADD with FSP and TSP for each of the 8 participants' individual designs, leading us to obtain 8 separate and individual diagrams that map each step of the structural transformation process of film into architecture; we refer to each of these new diagrams as an Individual Design Derivation Diagram or **IDDD**, and designate them the number

of their corresponding participant, e.g. IDDD-6 is the Individual Design Derivation Diagram corresponding to the interpretations and designs of Participant 6 (Figure 6.10).

In the IDDD then, the peripheral columns of the Components and Sub-Components remain unchanged; however, it is the more internal columns of the FSP and TSP, in addition to the central column of the actual architectural designs that change from 1) one participant to another, 2) one topic to another, and 3) one film to another.

Additionally, after completing the 4 IDDDs of each film, we group them all in a single diagram that we refer to as a film's Total Design Derivation Diagram, thus TDDD-RA (Figure 6.9) would be the one pertaining to RA, and TDDD-SC (Figure 6.14) that of SC.

We have to also specify that we insert the FSP and TSP in the IDDDs based on each participant's own interpretations of the films they were assigned: these interpretations were communicated to us either verbally during the individual presentations at the end of Phase 3 of the Workshop, or in written form on the individual design sheets as design descriptions or complementary notes. However, there were cases where some participants' interpretations of some FSP and/or TSP were either unclear or exceptionally misinterpreted; therefore we had to make our own interpretations and decisions of the available data in order to insert these FSP/TSP in their relatively proper places.

Moreover, during the process of our understanding and extracting the participants' interpretations and designs, we found that 2 additional notions had to be added to the IDDDs of 3 participants because they had given them significance and used them in their design processes: the first notion was the finding made by the members of Group 1 concerning the **Im-Signs**, which were interpreted and used by Participant 3 and Participant 4 (Figures 6.7 and 6.8) as the architectural space-defining minimal units they referred to as "**Spa-Signs**"; and the second notion, was the film **Viewer**, which was introduced by Participants 4 and 5 (Figures 6.8 and 6.9), and analogized to the **User** of actual architectural space. We classify the Im-Signs and "Spa-Signs" as Components because they are notions that can be generalized to all films and architectures; as for the Viewer/User situation, although they are not actual components of film/architecture in the proper sense, we still classify them as such at this stage of our research because we cannot undermine that 2 participants had used them in a design generating manner. Consequently, our preliminary generic FAADD is augmented with 2 additional Components and becomes the FAADD that the IDDDs are based on.

In the following sub-section we give detailed summaries of the participants' designs and then follow them with their respective IDDD.

6.4.1 DESIGN DERIVATIONS DIAGRAMS

P1 – RA – SHOPPING MALL (FIGURE 6.5)

P1 understood Film Diegesis as Form in architecture, and started her design process by interpreting the Continuous Diegesis of RA as being an Independent Form with Stable, Static and Rigid formal properties such as a Parallelepiped.

Narrative being analogous to Architectural Function, the Fragmented Narrative is represented by Fragmented Functions in the Shopping Mall and having Fragmented Spaces and Subspaces. The fragmentation of the latter occurs following the penetration of the Seawater in the building itself. This penetration is explained as follows: P1 considers that in RA there are “Active Existents” – characters who are constantly interacting one way or another with the European and the Camera-Figure (CF) – and “Passive Existents”³ – the paintings, sculptures and architectonic structure/decorations/murals of the Hermitage Museum that interact with/stimulate conversations and debates between the European, the CF and other “Active Existents when they stand/pass in front of the former – and the architectural analogy to the “Passive Existent” is then the pre-existing element on the site, the Sea; and so by placing the Stable/Rigid Volume on the site, the Sea is stimulated and interacts with it and “breaks” it into 2 by penetrating it.

The fracture into 2 main sections (harboring most of the functions) separated by a third one (central atrium) is explained as being the architectural analogy of the Narrative Syntagma Σ_i (00:49:36-00:52:10) which breaks the homogeneity of RA (by being the only external Σ): 2 large interior sections (composed of only internal NS) separated by an external Σ (Σ_i). Finally P2 considered the visual homogeneity of RA as being dynamic and in continuous cycle; the architectural representation of which is a cyclical transformation/movement of the penetrating Seawater: it enters the volume, breaks it into 2, moves up the void created by the break, exits it and climbs down its facades by becoming its architectonic wrapping material.

³ The “Active” and “Passive” adjectives added to Existents were introduced by P1 herself, and giving them the definitions that we mention in the text above.

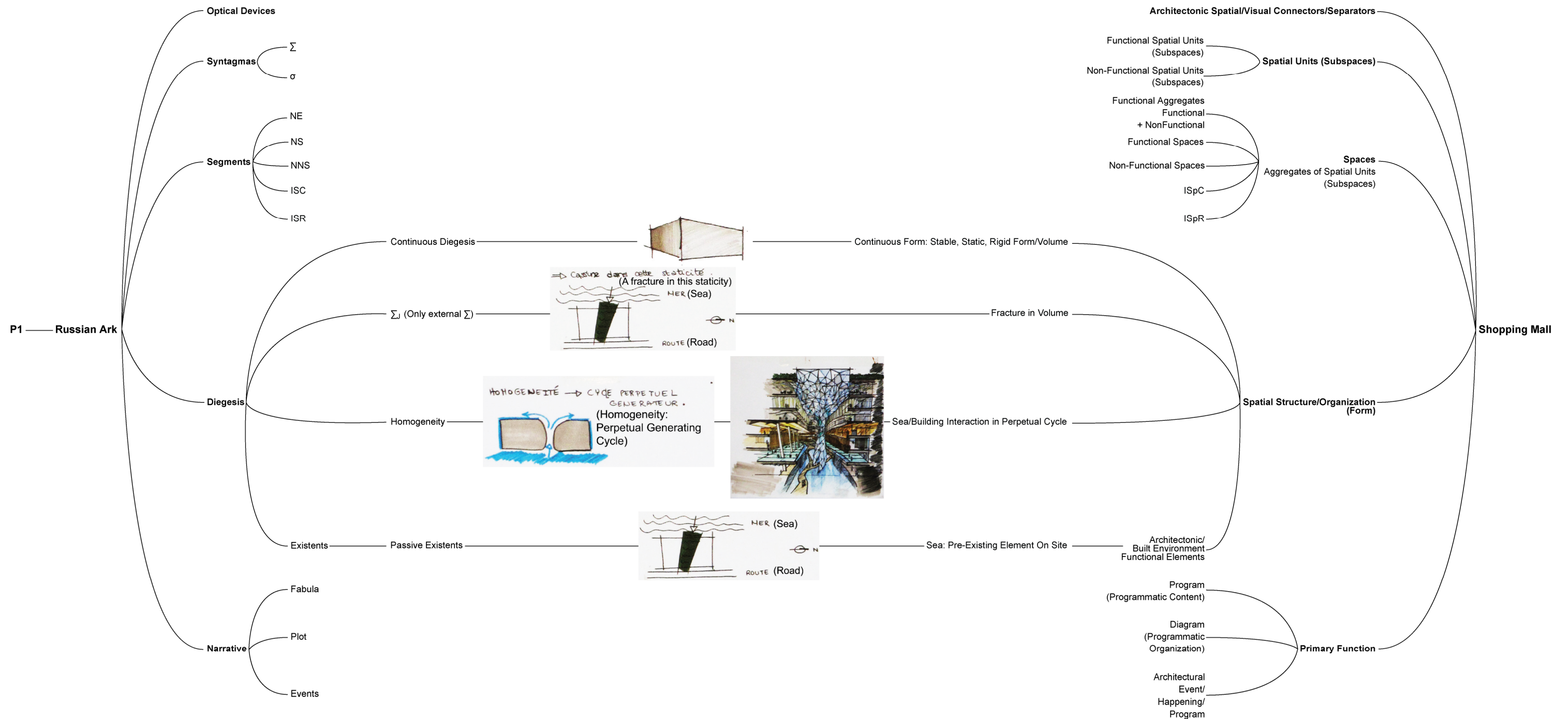


Figure 6.5 IDDD-1 (Individual Design Derivation Diagram of Participant 1)

P2 – RA – CULTURAL CENTER (FIGURE 6.6)

P2 considered that the Continuous Diegesis of RA is similar in form to a volume having Stable formal properties such as a Cube; therefore the starting point for the architectural design of P2 is a Cubic building. P2 also interpreted the Fragmented Narrative of RA as being a Dynamic one. The architectural analogy of a Dynamic Narrative for P1 is then an Organic Architecture with formal/organizational properties based on Algae and Corals since the site is by the sea. The Algae/Corals are represented by the vertical elements passing through the whole of the building; they contain the principal vertical circulations, technical functions (W.C., electromechanical/HVAC conduits, structure, etc.).

The Multiple Time-Jumps in RA are interpreted as Unstable Functions where the internal configuration of building of which the Programmatic Organization is dependent, becomes highly mobile, interchangeable, and highly configurable, adapting to periodic/punctual programmatic needs. Finally, the internal architectonic elements and programmatic changes/configurations are not perceived from the outside (translucent façade) as a means to accentuate the inside/outside contrast emphasizing the contrast between the Diegetic and Narrative structural properties in RA.

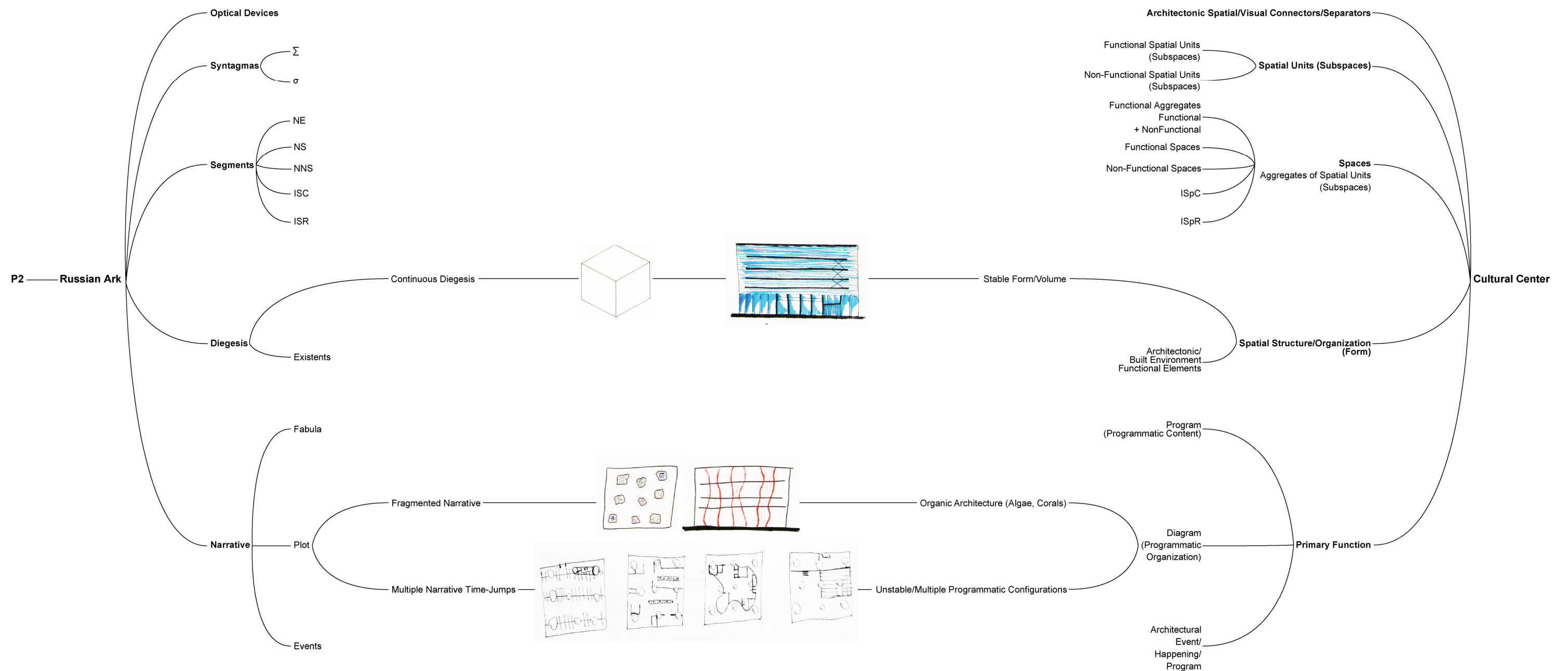


Figure 6.6 IDDD-2 (Individual Design Derivation Diagram of Participant 2)

P3 – RA – RESIDENTIAL COMPLEX (FIGURE 6.7)

The starting point of P3 was to consider the architectural analogies of Narrative, Fabula, Syuzhet and Diegesis as, respectively, Function, Program, Diagram and Form. The architectural counterpart of the filmic Codes that regulate and join together Narrative and Diegesis, are the architectural Signs. Since RA is a single Continuous Shot, or a single Large Segment subdivided into smaller Σ , and since a film Segment is analogous to architectural Space, P3 considered her Residential Complex to be a single Large Space that is subdivided into/contains multiple smaller Subspaces. As RA is considered to be composed of 15 Σ , P3's Residential Complex is then also composed of 15 Apartments (or Subspaces). As for RA's Non-Narrative Syntagmas, P3 translated them into Gardens (Non-Functional Spaces) punctuating the circulation path of the building. In RA, the Σ are delimited and defined by Im-signs; thus, based on the architectural theories of De Stijl (where Planes are the basic and primary elements that compose a 3D space) P3 considered the Plane as the architectural equivalent of an Im-sign, and designated it as "Spa-sign", the basic element that a Subspace is composed of. The Circulation in P3's project is the architectural representation of the CF and the path he takes. As the Narrative Progression along this path is Non-linear, the Residential Complex's Circulation, linking the Subspaces (Apartments), in turn becomes a Non-linear, Irregular and Up Down path.

Finally, RA opens with the words "I open my eyes... and I see nothing" uttered in darkness by the CF, and closes with him exiting the Hermitage and into the bright Volga River and speaking "Look... the sea is all around. We are destined to sail forever... to live forever". P3 converted this movement from darkness to light, from a perception of nothingness to a perception sea, into architecture and into the Residential Complex as an upward path of the general Circulation: starting from the underground level (the building entrance) and going up reaching the roof level where one can see the Sea all around. This also contributed in the positioning of the building in the site: centered in a pond of water.

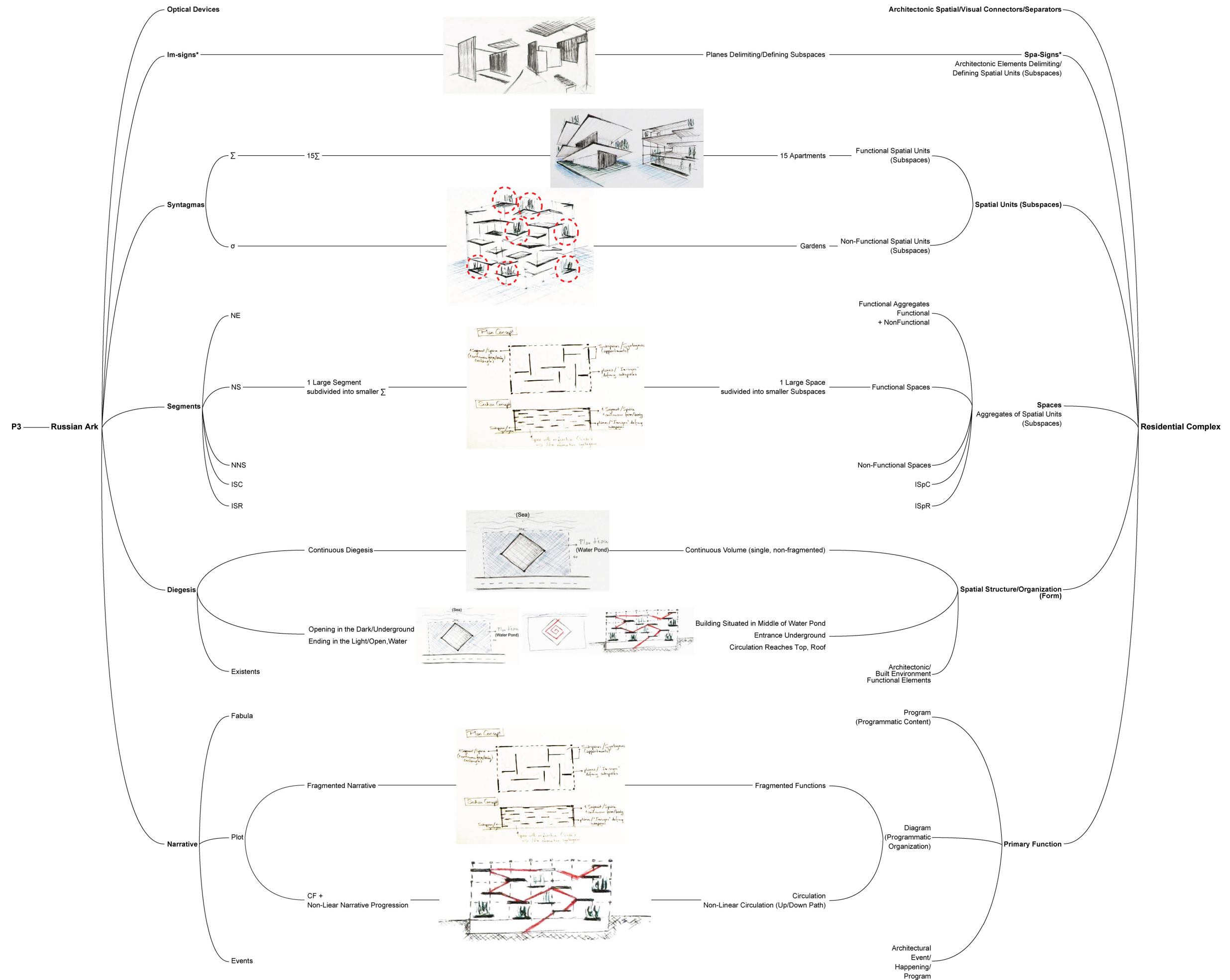


Figure 6.7 IDDD-3 (Individual Design Derivation Diagram of Participant 3)

P4 – RA – FERRY TERMINAL (FIGURE 6.8)

As Narrative in film is considered analogous to Function in architecture, Fragmented Narrative becomes analogous to Fragmented Function. Similarly, Diegesis being analogous to Form, the Continuous and Dynamic properties of RA's Diegesis are translated into architecture by giving the Ferry Terminal a Continuous and Dynamic Form. Film Diegesis is a notion with properties that are Dependent and Independent of Narrative, therefore P4 represented this in the Ferry Terminal's architecture as a Single Foldable Surface that defines Functions in some parts, and just (non-functional) Spaces in others. The fact that RA is a Single Shot film without any editing/cuts is used to emphasize the Linearity of the Ferry Terminal's General Form. Segments are considered to bind Narrative to Diegesis, just as Spaces bind Function to Form. Thus Narrative Segments (NS) become Functional Spaces, whereas Non-Narrative Segments (NNS) are considered as the Circulation of the Ferry Terminal: both of these architectural elements are defined and shaped by the transformations of the Single Foldable Surface.

Furthermore, P4 considered that there is no real communication between Segments in RA, as there are no clear narrative continuities between Segments, other than the traveling of the European and the CF from one Hermitage space to another; this lack of inter-segmental communication is interpreted in the Ferry Terminal as a lack of direct communication between its 3 main functions – administration, arrivals hall and departures hall – to the extent of providing each of them with independent accesses. The filmic Im-signs (the minimal units that define and distinguish Narrative Syntagmas) of RA are translated as Functional Furniture and Lighting Elements that define the Functionality of a Space and distinguished it from another.

Finally, P4 makes a clear distinction between the simple Spectator of RA and its Analyst (a Viewer who watches RA more than once and/or on a deeper level): P4 considers that a simple Spectatorial experience of RA is similar to an External viewing of the Ferry Terminal, as they perceive both the film and the architecture on a shallow level, not noticing/experiencing their deeper internal structures and complexities – RA and the Ferry Terminal are thus perceived as just having respectively a Linear, Dynamic, Continuous and Homogeneous Diegesis and Form. On the other hand, the Analyst and the User (of RA and the Ferry Terminal respectively) by having a deeper experience of both works of art, perceive the full extent of their internal as well external complexities; this is thus emphasized in the Ferry Terminal's difference between its Linear, Dynamic, Continuous and Homogeneous External Form and its Fragmented and Non-Homogeneous Internal Spatial Structure .

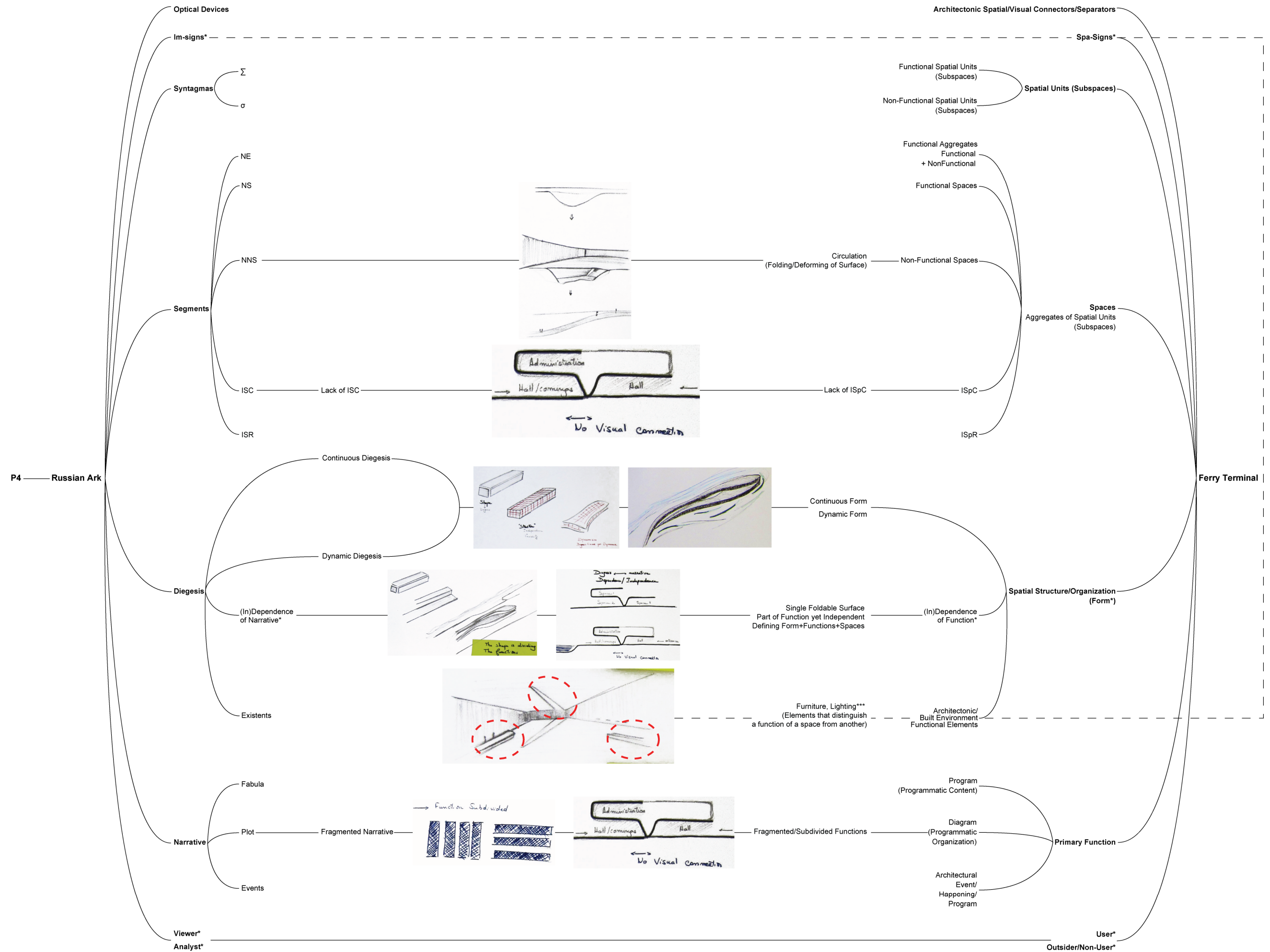


Figure 6.8 IDDD-4 (Individual Design Derivation Diagram of Participant 4)

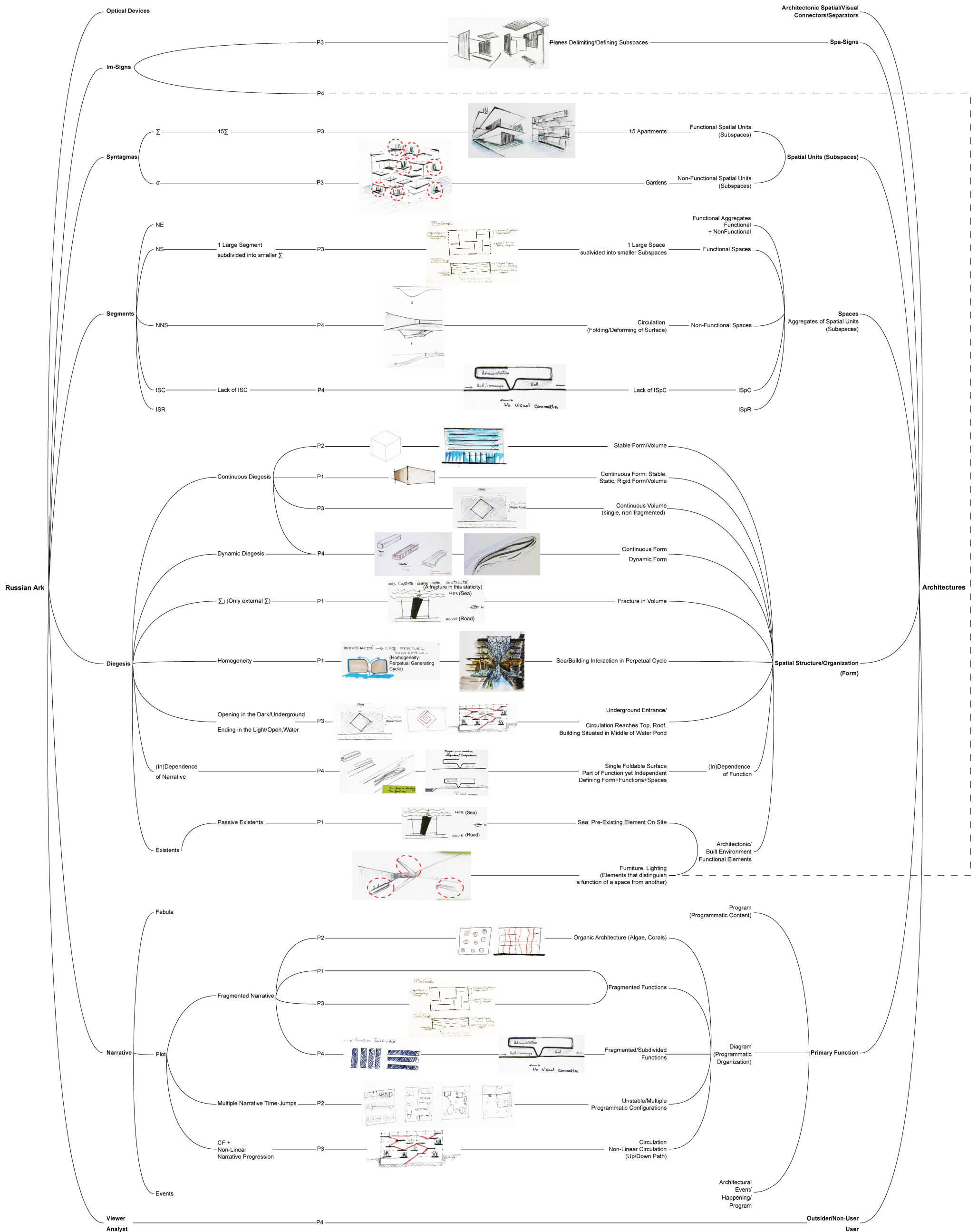


Figure 6.9 TDDD-RA (Total Design Derivation Diagram of *Russian Ark*)

P5 – SC – SHOPPING MALL (FIGURE 6.10)

P5 adopted that the film starts from a certain time $t_0=0$ to a certain $t_x=x$: the first one representing the start of the SC, and the second representing the ending with all the incertitude of the open narratives of some NE. The first time limit, t_0 , is represented in his Shopping Mall in the manner of a well-defined entrance from the Roadside, and the second, t_x , by means of a penetration of the building into the Seawaters. The NE are converted into Volumes or Spaces that contain 1 or 2 functions, and as they represent individual families in SC, they interact with each other just as the latter do. P5 considers then that the NE Interactions are on the Love/Affection Level, and architecturally interpreting them as Interactions between Spaces/Functions. Moreover, the Love/Affection exchanges generate additional functions that usually would not exist in a Shopping Mall, such as a Medical Center and Private Clinics; these interactions are also represented as interactions between P5's architecture and its surrounding urban neighborhood. Finally, P5 considers that the interactions and correlations between all the NE are Chaotic and some of their Narratives Missing and Incomplete; thus the Chaos is Ordered and the Narratives Completed by the Imagination of the Viewer in order to be better understood. The Chaos is translated in architecture in the form of the Mall's Commercial Areas being lowered underground, with a spatial/circulation network inspired by Vernacular Souks. As for the Viewer Imagination, P5 represented it by adding a raised well-structured and organized platform on top of the Commercial Areas, and injecting in them culture-oriented functions, such as open-air Exhibition Areas and Multifunctional Spaces for artists.

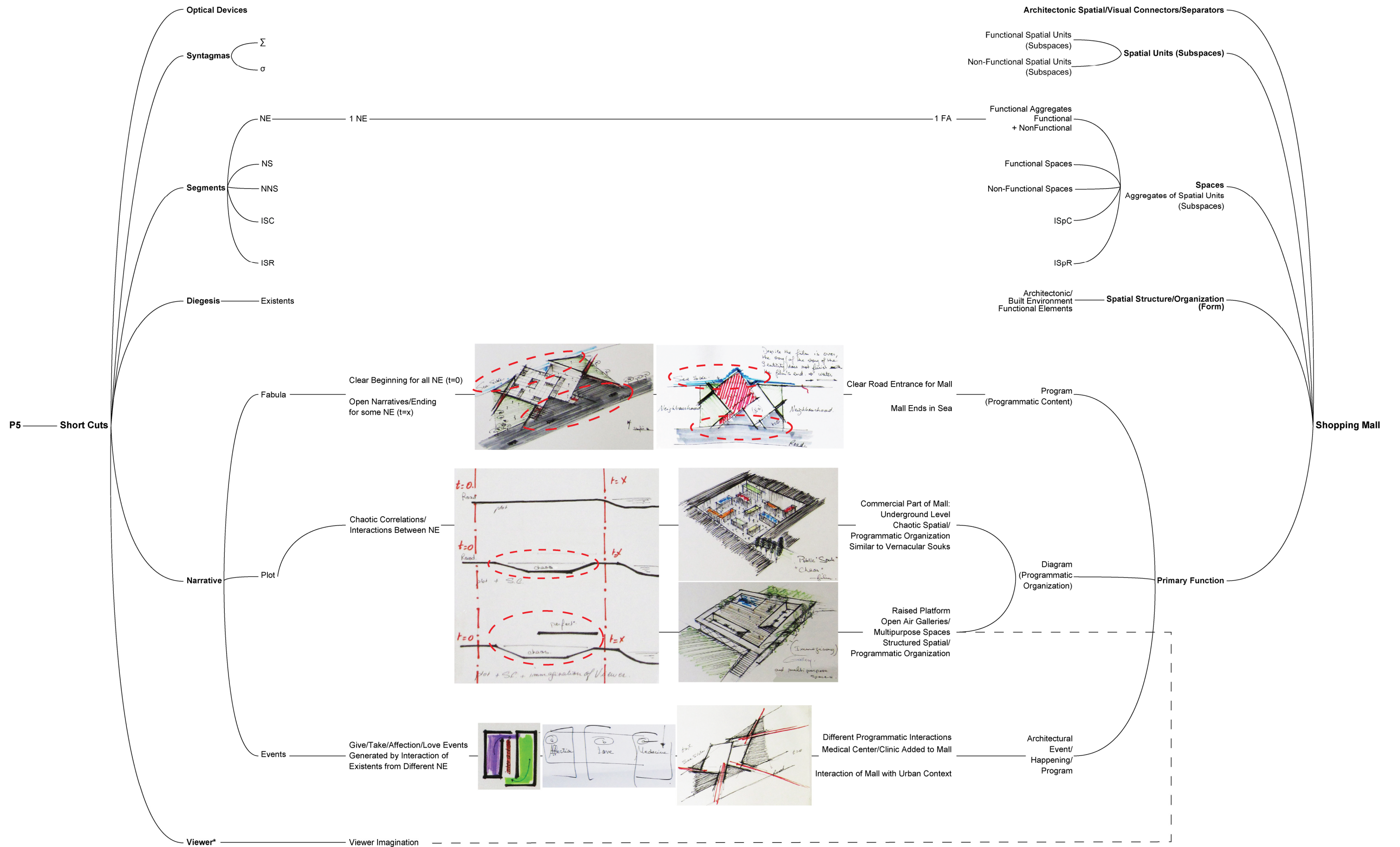


Figure 6.10 IDDD-5 (Individual Design Derivation Diagram of Participant 5)

P6 – SC – CULTURAL CENTER (FIGURE 6.11)

Typically starting off by taking into consideration the analogies of Narrative, Diegesis, and Segments as being respectively Function, Form/Structure, and Spaces, P6 continued by also considering each NE as analogous to a single Function. As the NE are Fragmented into multiple NS, P6 considered the latter as the Spaces of the former Functions, while being connected by Visual, Thematic, etc. Connections, or Inter/Intra-Spatial Connections/Relations (ISpC/ISpR), that refer back to the Inter/Intra-Segmental Connections/Relations (ISC/ISR) of SC. The Visual ISpR are manifested by Visual Relations between spaces, and the Spatial ISpR are manifested in the form of Double-Height Voids linking more than one space. Some NE in SC don't have clear endings to their narrative (open narrative), as the viewer is left with uncertainties and wondering about how it would continue after the end of the film; on the other hand, other NE have clear endings to their narrative (closed narrative). The Open/Closed Narrative NE were architecturally interpreted by P6 as follows: the first, functional spaces with large openings and esplanades toward the open horizon of the sea, and the second, functional spaces with clear spatial/visual/physical limits. Moreover, P6 indicated that some NE have strong correlations while others don't. These correlations are on the Existents level of SC's Narrative: Characters of certain NE have kinship or are friends with Characters from other NE, while others don't (the presence of their Characters with those from other NE is purely "coincidental" and exceptional). The existence of correlations is architecturally interpreted as 2 or more spaces located under a same roof, whereas the non-existence of strong correlations is interpreted as a space having Indirect Functional Influences over another; these latter influences occur in a single common space where the functions/events corresponding to the spaces (those representing the NE without strong correlations) surrounding it would temporarily and occasionally co-exist (e.g. temporary painting exhibition taking place simultaneously with a live music concert). Another idea based on Narrative Existents that P6 introduces in her interpretative designs is the idea of using Events/Connotations generated by them as inspiration for Architectural Program; for example in NE_T, the mother and daughter characters are musicians, thus P6 includes a conservatory/music school in her Program. Furthermore, P6 assumes that the Progression of Events in each NE is Linear, and thus implementing it into her architecture as Linear Circulations inside each Functional Space; however, she also adopts that since SC is made of Erratic Non-Stop Jumps between NS (in other words, the Plot of SC fragments its Narrative Progression), the General Circulation Path of her architecture (Cultural Center) is Non-Identified/Non-Organized leaving the door open for its users to choose their own paths. This General Circulation Path also has a clear single entry point representing the first Major Narrative Event in SC that is common to all NE. P6's Cultural Center also has a Large Vertical Void close to its sea limits that cuts through the whole building, and after which the functional

spaces referring to NE with open narratives open up to the sea with the esplanades. This Large Vertical Void refers back to the second Major Narrative Event common to all NE at the end of SC. Finally, just as 9 NE are put together to form a single coherent artistic film entity known as SC, P6 adopts 9 principle Functional Spaces/Volumes that form the essence of her Cultural Center.

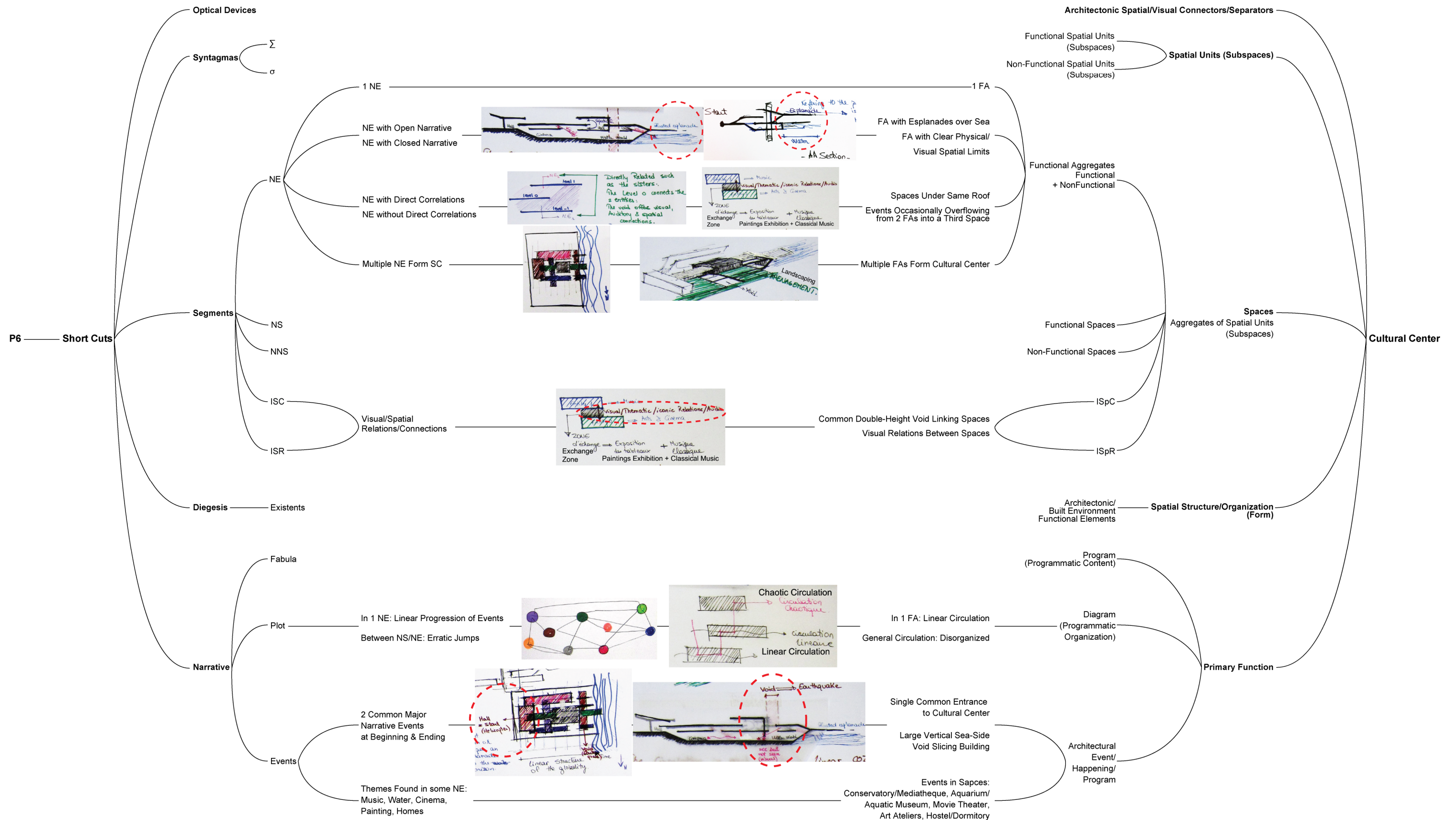


Figure 6.11 IDDD-6 (Individual Design Derivation Diagram of Participant 6)

P7 – SC – RESIDENTIAL COMPLEX (FIGURE 6.12)

P7 starts off by enumerating the different film elements and their architectural analogies she had considered important for her design. Syntagmas that are defined by shots and camera movements, become the Architectural Objects in a Residential Unit (RU) of her project. Segments being defined by Multiple Syntagmas, become analogous to Spaces defined or delimited by the Architectural Objects in a RU. As multiple Segments define a single NE in SC, so do Multiple Spaces define a single RU; and in consequence, the total number of NE in SC being 9, the total number of RUs in the Residential Complex become also 9. Moreover, these 9 NE joined together form a single film entity that is SC, thus the 9 RUs grouped together form a single architectonic entity that is this particular Residential Complex derived from SC. The film in question is fragmented by its NE, Segments and Diegesis, therefore the architecture in question is also considered fragmented by its Functions, Spaces and Forms. P7 interpreted (architecturally) the Diegetic Settings common to all NE as a single General Space containing all 9 RUs; as for the 2 Major Narrative Events in the beginning and ending of SC common to all 9 NE (respectively: the helicopters flying-over spraying chemicals, and the earthquake) as 2 Vertical Common Functional Blocks situated at 2 extremities of her building, and containing the shared Amenities/Technical Functions and the Vertical Circulations. The 9 RUs are stratified 1 RU per floor, each individually becoming a horizontal entity by itself, as a representation of the Sequential Progression of Events in each NE. The Social Problems treated in the NE are interpreted as an ordering element in the form of a Cartesian Structural Grid that holds the whole complex together. However, as these Problems revolve around the subjects of Jealousy and Infidelity, P7 added externally to the latter Grid another 45° rotated Grid: the Facades of the building are thus framed by 2 overlapping grids; furthermore, as a means to represent the mysteries of the Open Narratives of some NE, the gaps between the structural gridlines were made of Translucent materials. Finally, the Inter-Segmental Connections were converted into Inter-RU Connections/Relations (Visual, Auditory), and the Intra-Segmental Relations into Intra-RU Spatial Relations.

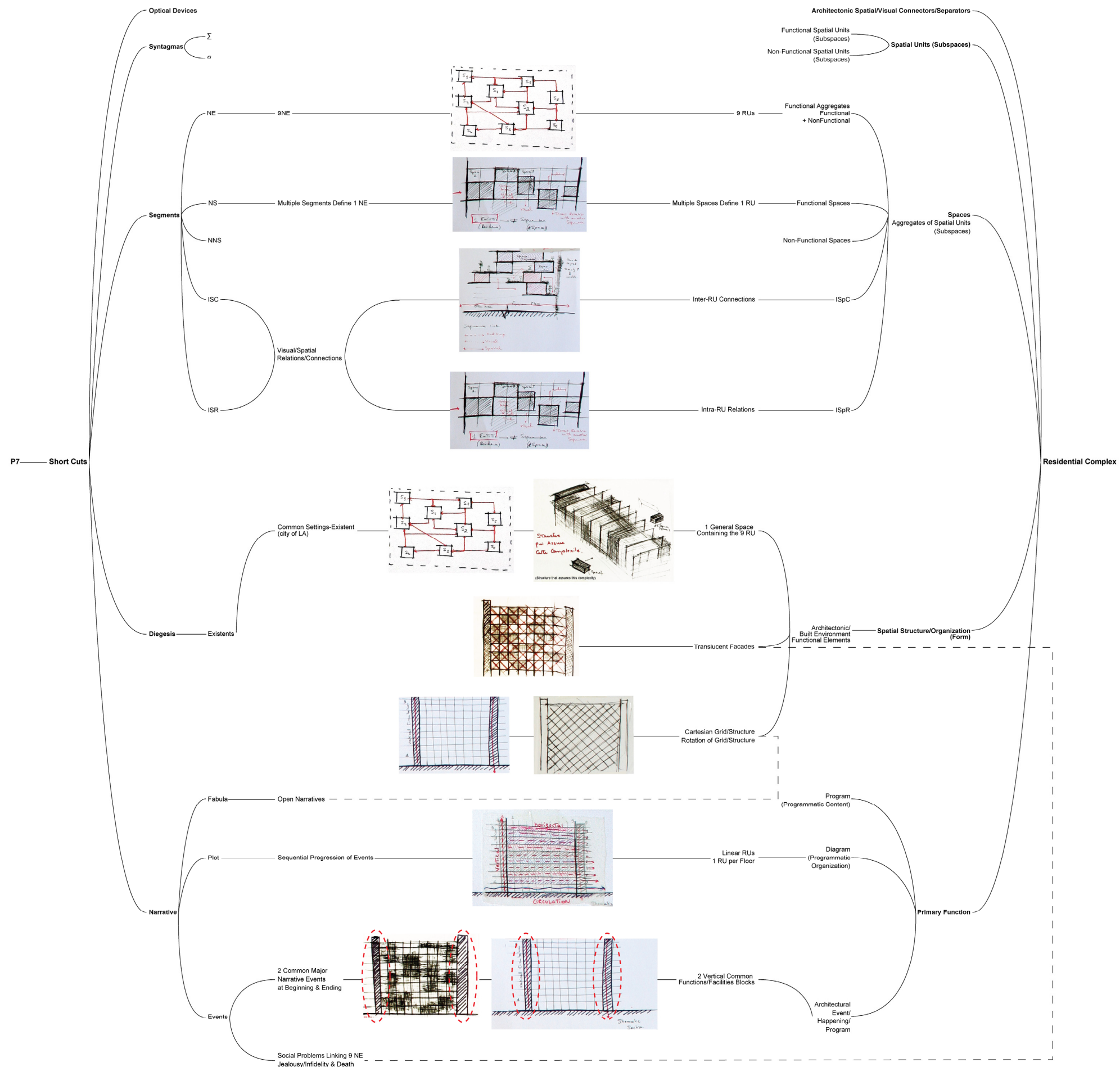


Figure 6.12 IDDD-7 (Individual Design Derivation Diagram of Participant 7)

P8 – SC – FERRY TERMINAL (FIGURE 6.13)

The 9 NE in SC start off with a common Major Narrative Event spanning all of their narratives; thus the main entrance to P8's Ferry Terminal is located in the center of the project, from which all other functions and spaces originate. P8 organized the NE into 4 types: 1) those that have Narratives with a clear Beginning and Ending (NE_s), 2) those that have a Narrative Beginnings and Endings linked to another NE ($NE_{wy} + NE_{kn}$), 3) those that have a clear Beginning, but not an Ending, i.e. Open Narrative (NE_{we}), and finally, 4) those having a clear Beginning linked to another NE, but without any Endings for both ($NE_{ks} + NE_B$). These 4 types of NE translated into the Ferry Terminal become (respectively): 1) Elevators and Emergency Stairs, 2) an Internal Pedestrian Ramp, and a Main Glass Volume, 3) the Boarding Decks (ending up in the sea and the ferries), and finally, 4) an External Ramp with 2 directions that end up vertically towards the sky. The relations between the NE being chaotic, P8 gave the Terminal a Linear and Chaotic/Unclear design.

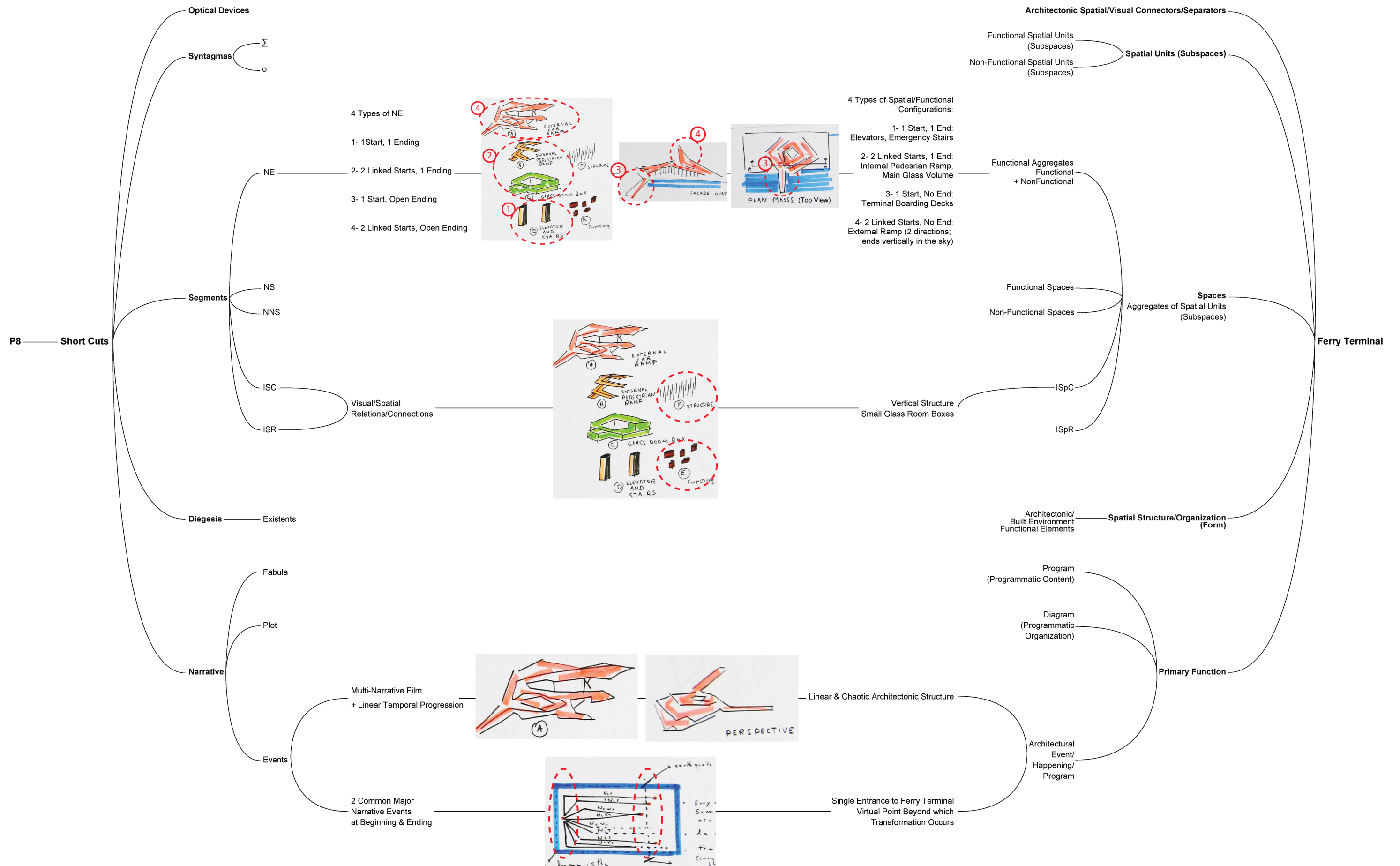


Figure 6.13 IDDD-8 (Individual Design Derivation Diagram of Participant 8)

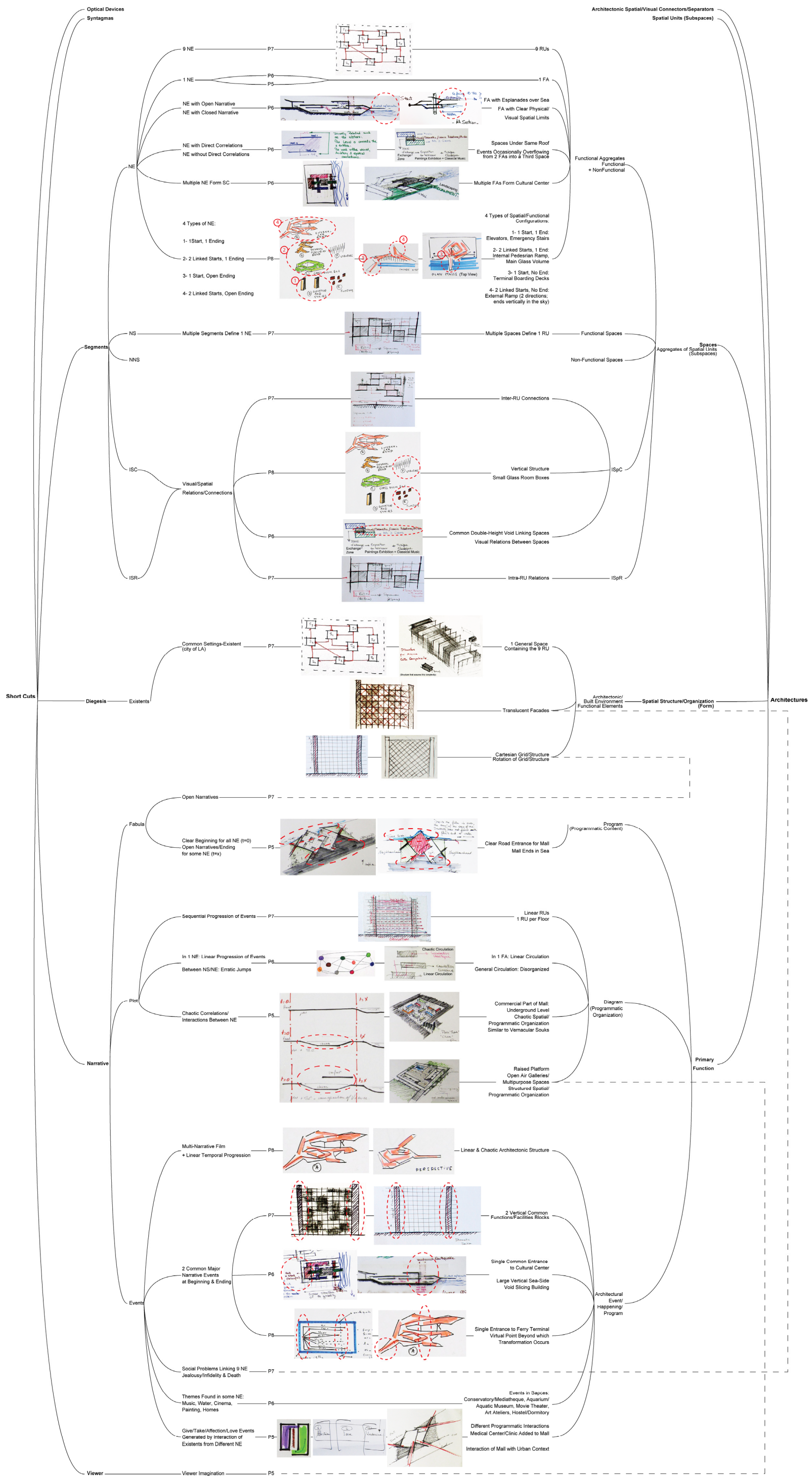


Figure 6.14 TDDD-SC (Total Design Derivation Diagram of *Short Cuts*)

6.4.2 COMPARATIVE TABLES

Having completed all 8 IDDDs and TDDD-RA and TDDD-SC, we start exploring them from different angles; we reorganize the FAADD in Table form again and add to it the newly acquired data from the IDDDs in more abstract and accessible ways, providing us with many valuable analytical charts.

In Table 6.1a, we map within a single film group the usage patterns of the film Components and Sub-Components by each participant. For example in the case of Participant 3 (P3 in the Table) the film of origin is RA, and the design topic is Residential Complex, and she made use of the following (Sub)Components in her design process: Im-Signs, Narrative Syntagmas, Non-Narrative Syntagmas, Diegesis, and Plot.

In Table 6.1b we reverse the approach of Table 6.1a, meaning that we survey 2 design processes and usage patterns that fall under a same design topic, while being derived from 2 different films, e.g. Participant 1 and Participant 5 have the same architectural design topic of Shopping Mall, but the first has RA as film of origin, whereas the second has SC.

While in Table 6.1a, we follow and compare within a single group the usage patterns of film (Sub)Components that respond to 4 different design topics while being derived from a single common film, Table 6.1c portrays the general usage patterns of each film with the other, i.e. RA general usage pattern v/s SC general usage pattern.

The main purpose of these 3 Tables is to clarify, if, how and to what degree, the differentiated/common films/topics can affect the participants' choices in (Sub)Components usage during the early conception phases of their design processes.

Tables 6.1a and 6.1b are based on the 8 IDDDs, while Table 6.1c is based on Figures 6.9 and 6.14, and the sum total of the (Sub)Component patterns of each film from Table 6.1a.

Table 6.1a (Sub)Components Usage Pattern Chart – Common Film, Different Topics

	Components	Sub-Components	RA				SC			
			P1	P2	P3	P4	P5	P6	P7	P8
Narrative Film	Optical Devices									
	Im-Signs									
	Syntagmas	Narrative Syntagmas (Σ)								
		Non-Narrative Syntagmas (σ)								
	Segments	Narrative Entities (NE)								
		Narrative Segments (NS)								
		Non-Narrative Segments (NNS)								
		Inter-Segmental Connection (ISC)								
		Intra-Segmental Relation (ISR)								
	Diegesis									
		(In)Dependence from/on Narrative								
		Existents								
	Narrative	Fabula								
		Plot								
		Events								
	Viewer									

Table 6.1b (Sub)Components Usage Pattern Chart – Common Topic, Different Films

	Components	Sub-Components	Shopping Mall		Cultural Center		Residential Complex		Ferry Terminal	
			P1	P5	P2	P6	P3	P7	P4	P8
Narrative Film	Optical Devices									
	Im-Signs									
	Syntagmas	Narrative Syntagmas (Σ)								
		Non-Narrative Syntagmas (σ)								
	Segments	Narrative Entities (NE)								
		Narrative Segments (NS)								
		Non-Narrative Segments (NNS)								
		Inter-Segmental Connection (ISC)								
		Intra-Segmental Relation (ISR)								
	Diegesis									
		(In)Dependence from/on Narrative								
		Existents								
	Narrative	Fabula								
		Plot								
		Events								
	Viewer									

Table 6.1c (Sub)Components General Usage Pattern Chart

	Components	Sub-Components	RA	SC
Narrative Film	Optical Devices			
	Im-Signs			
	Syntagmas	Narrative Syntagmas (Σ)		
		Non-Narrative Syntagmas (σ)		
	Segments	Narrative Entities (NE)		
		Narrative Segments (NS)		
		Non-Narrative Segments (NNS)		
		Inter-Segmental Connection (ISC)		
		Intra-Segmental Relation (ISR)		
	Diegesis			
		(In)Dependence from/on Narrative		
	Narrative	Fabula		
		Plot		
		Events		
	Viewer			

Tables 6.2a and 6.2b are the respective resultants of TDDD-RA and TDDD-SC. In them we add up the number of FSP and then TSP derived from each film's (Sub)Components in order to study their "derivability". The higher the number of FSP derived from a (Sub)Component, 1) the more crucial it is to its corresponding film, 2) the more "derivable" or useful it is to induce Architectural Interpretations and TSP. We also observe that at least 1 FSP of *Diegesis* and *Plot* in Table 6.2a, and *Events* in Table 6.2b has generated more than 1 TSP.

With these charts we can also reinforce our understanding on the impact of a specific film with its (Sub)Components and FSP on the Architectural Interpretations of the designers.

Table 6.2a (Sub)Components Derivability Chart – RA

	Components	Sub-Components	FSP	TSP	TSP/ Component
RA	Optical Devices		0	0	0
	Im-Signs		2	2	2
	Syntagmas	Narrative Syntagmas (Σ)	1	1	2
		Non-Narrative Syntagmas (σ)	1	1	
	Segments	Narrative Entities (NE)	0	0	3
		Narrative Segments (NS)	1	1	
		Non-Narrative Segments (NNS)	1	1	
		Inter-Segmental Connection (ISC)	1	1	
		Intra-Segmental Relation (ISR)	0	0	
	Diegesis		5	7	9
		(In)Dependence from/on Narrative	1	1	
	Narrative	Fabula	0	0	5
		Plot	3	5	
		Events	0	0	
	Viewer		1	1	1

Table 6.2b (Sub)Components Derivability Chart – SC

	Components	Sub-Components	FSP	TSP	TSP/ Component
SC	Optical Devices		0	0	0
	Im-Signs		0	0	0
	Syntagmas	Narrative Syntagmas (Σ)	0	0	0
		Non-Narrative Syntagmas (σ)	0	0	
	Segments	Narrative Entities (NE)	6	6	11
		Narrative Segments (NS)	1	1	
		Non-Narrative Segments (NNS)	0	0	
		Inter-Segmental Connection (ISC)	3	3	
		Intra-Segmental Relation (ISR)		1	
	Diegesis		0	0	1
		(In)Dependence from/on Narrative	0	0	
		Existents	1	1	
	Narrative	Fabula	2	2	12
		Plot	3	3	
		Events	5	7	
	Viewer		1	1	1

In Tables 6.3a, 6.3b and 6.3c we study the usability and frequency of use of each (Sub)Component. In Table 6.3a we count and place the total number of participants having used a Sub-Component and a Component; whereas in Table 6.3b and 6.3c we count and place the number of times each participant used a Sub-Component and a Component. In Table 6.3a, the higher number of participants using a (Sub)Component reflects its importance to the specific film, while Table 6.3b and 6.3c reflect the relevance of each (Sub)Component to every participant, and in consequence, to each topic.

Table 6.3a (Sub)Components Usability Rate

	Components	Sub-Components	Participants/ Sub-Component		Participants/ Component	
			RA	SC	RA	SC
Narrative Film	Optical Devices		-	-	0	0
	Im-Signs		-	-	2	0
	Syntagmas	Narrative Syntagmas (Σ)	1	0	1	0
		Non-Narrative Syntagmas (σ)	1	0		
	Segments	Narrative Entities (NE)	0	4	2	4
		Narrative Segments (NS)	1	1		
		Non-Narrative Segments (NNS)	1	0		
		Inter-Segmental Connection (ISC)	1	3		
		Intra-Segmental Relation (ISR)	0			
	Diegesis		-	-	4	1
		(In)Dependence from/on Narrative	1	0		
		Existents	1	1		
	Narrative	Fabula	0	2	4	4
		Plot	4	3		
		Events	0	4		
	Viewer		-	-	1	1

Table 6.3b (Sub)Components Usage Frequency Rate – RA

	Components	Sub-Components	Sub-Components				Components			
			P1	P2	P3	P4	P1	P2	P3	P4
RA	Optical Devices		-	-	-	-	0	0	0	0
	Im-Signs		-	-	-	-	0	0	1	1
	Syntagmas	Narrative Syntagmas (Σ)	0	0	1	0	0	0	2	0
		Non-Narrative Syntagmas (σ)	0	0	1	0				
	Segments	Narrative Entities (NE)	0	0	0	0	0	0	1	2
		Narrative Segments (NS)	0	0	1	0				
		Non-Narrative Segments (NNS)	0	0	0	1				
		Inter-Segmental Connection (ISC)	0	0	0	1				
		Intra-Segmental Relation (ISR)	0	0	0	0				
	Diegesis		-	-	-	-	4	1	2	2
		(In)Dependence from/on Narrative	0	0	0	1				
		Existents	1	0	0	0				
	Narrative	Fabula	0	0	0	0	1	2	2	1
		Plot	1	2	2	1				
		Events	0	0	0	0				
	Viewer		-	-	-	-	0	0	0	1

Table 6.3c (Sub)Components Usage Frequency Rate – SC

	Components	Sub-Components	Sub-Components				Components			
			P5	P6	P7	P8	P5	P6	P7	P8
SC	Optical Devices		-	-	-	-	0	0	0	0
	Im-Signs		-	-	-	-	0	0	0	0
	Syntagmas	Narrative Syntagmas (Σ)	0	0	0	0	0	0	0	0
		Non-Narrative Syntagmas (σ)	0	0	0	0				
	Segments	Narrative Entities (NE)	1	4	1	1	1	5	4	2
		Narrative Segments (NS)	0	0	1	0				
		Non-Narrative Segments (NNS)	0	0	0	0				
		Inter-Segmental Connection (ISC)	0	1	2	1				
		Intra-Segmental Relation (ISR)								
	Diegesis		-	-	-	-	0	0	1	0
		(In)Dependence from/on Narrative	0	0	0	0				
		Existents	0	0	1	0				
	Narrative	Fabula	1	0	1	0	3	4	4	2
		Plot	1	1	1	0				
		Events	1	3	2	2				
	Viewer		-	-	-	-	1	0	0	0

6.4.3 INDIVIDUAL DESIGN PROCESS SEQUENCING

After conducting a thorough analysis and mappings of each individual participant's structural transformation processes of film components into architecture, we now proceed to conduct a similar mapping of the generative design processes of 4 representative cases: P1 (Group 1, RA, Shopping Mall), P3 (Group 1, RA, Residential Complex), P5 (Group 2, SC, Shopping Mall), and P7 (Group 2, SC, Residential Complex). We have chosen these 4 participants' design processes because of the important differences that already exist between their final submitted works and their designs' structural transformation mappings: although they have the same corresponding topics, P1's and P3's designs look more simplistic if not minimalist, when compared with their respective counterparts', P5 and P7's designs, which are more complex and thorough.

These Individual Design Sequencing Diagrams, or **IDSDs**, map the temporal sequences in which each participant's transformation process took place. The IDSDs expose 1) which (Sub)Components and/or FSP are the most "appealing" for each participant in order for them to start with, and 2) how, and on what level of the design process, these "appealing" elements start transforming into architectonic ones, and 3) the amount of influence the Structuralist Semio-Linguistic structuring of film (Sub)Components and their architectural analogies can have on a design process, i.e. does it render the actual transformation process of film (Sub)Components carried out by each participant more "structured"?

In the IDSDs then we focus on the concepts that led, or contributed to the actual transformation processes of each participant. This implies that in our mappings we don't take into consideration participants' concepts and ideas that haven't lead to any perceptible transformation of film (Sub)Components, or any architectural design that can be traced back to a film (Sub)Component.

The IDSDs (Figures 6.15, 6.17, 6.19, and 6.21) are read in the following manner:

1. Each concept/idea is sequenced from top to bottom according to its first appearance in the general sequence of the design process⁴; this means that each is referred to only once (the first time it appears) in the diagrams, no matter how many times it was mentioned or used by the participant.
2. The concepts/ideas that we feel belong to the same thread of thoughts are placed directly under each other in a same column, whereas those that seem not to be part of

⁴ The sequencing is based on the video recordings and our transcriptions of the participants' final individual presentations given at the end of Phase 3 of the workshop. Since we could not personally follow or record every single step of each participant's design process during the actual conception phase of their designs, we assume here that the sequence their concepts/ideas/designs are presented in are appropriate enough for our analysis.

that exact same thread are still placed below the others but in parallel columns (to the right) stimulating new threads.

3. The numbers refer to the order of appearance of, or the step that leads to a concept/idea; since a concept/idea can be mentioned more than once, we refer to this repetition by numbering accordingly every step of the process, meaning that it can have more than one step/arrow leading to it.
4. An arrow pointing to a concept/idea implies that it is derived from, generated by, or related to the concept/idea the arrow is originated from; a concept/idea can generate or influence more than one concept/idea, and in case an arrow goes back upward, this means that the one it is pointed at is repeated/mentioned more than once by the participant.

After sequencing the concepts/ideas of P1, P3, P5, and P7's IDSDs, we proceed in Figures 6.16, 6.18, 6.20 and 6.22 with distinguishing the FSPs from the TSPs to each of whom we also attach the corresponding architectural designs of the participants. The FSPs are enclosed with rectangular bubbles, and the TSPs with circular ones, and each grouping is designated a Roman numeral that refers to its order of appearance in the general sequence of the process. Finally, each grouping is also composed of sub-groupings (labeled with the small Roman letters) that we have encircled together because they are directly related to each other, and/or are generators of the same architectural designs.

We describe each IDSD and its subsequent analytical diagram in written form in the following sections:

IDSD-1 (FIGURE 6.15 AND FIGURE 6.16)

Figure 6.15: P1 begins her discourse with some generalities that lead her to the actual starting point of the design process, which is *Fragmented Narrative* (1) that is analogous to *Fragmented Functions* (2). Then *Continuous Diegesis* (3) appears followed by the analogous *Continuous Form* (4) that implies an *Independent, Stable, Static and Rigid Form/Volume* (5). The latter defines the *External Hull* (6) of the building. *Fragmented Narrative* reappears in the discourse again to justify the appearance of *Fragmented Spaces & Sub-Spaces* (7). At this point the concept of *Passive Existents* (8) comes into light in the form of the existing *Sea* (9) that exerts an action on the *Independent, Stable, Static and Rigid Form/Volume* (10) generating *Fragmented Spaces & Sub-Spaces* (11). The *Sea* is mentioned again as it refers to Σ , the only external Σ in RA (12) which explains again how the *Fragmented Spaces & Sub-Spaces* (13) were generated. The new idea of *Homogeneity in RA* (14) appears at this stage to generate the concept of a *Continuous Cycle* (15)

the *Sea (16)* is in as it enters the *Independent, Stable, Static and Rigid Form/Volume (17)* and exits it from the top to generate its covering “crystalline” *External Hull (18)*.

Figure 6.16: By distinguishing the FSPs from the TSPs and adding the architectural sketches to the IDSD, we notice that the principle TSPs that generate the architectural designs are located in the center of the diagram (grouping IV), and in consequence in the middle of the sequence of P1’s design process. From only 2 FSPs (groupings I & III) P1 managed to derive 3 focal TSPs (a, b, and c) that generated or co-generated all of the architectonic elements in her design; as for the FSPs/TSPs located in the groupings V, VI, and VII, they mostly play a role of additional/complementary justifiers of the already elaborated concepts and generated designs.

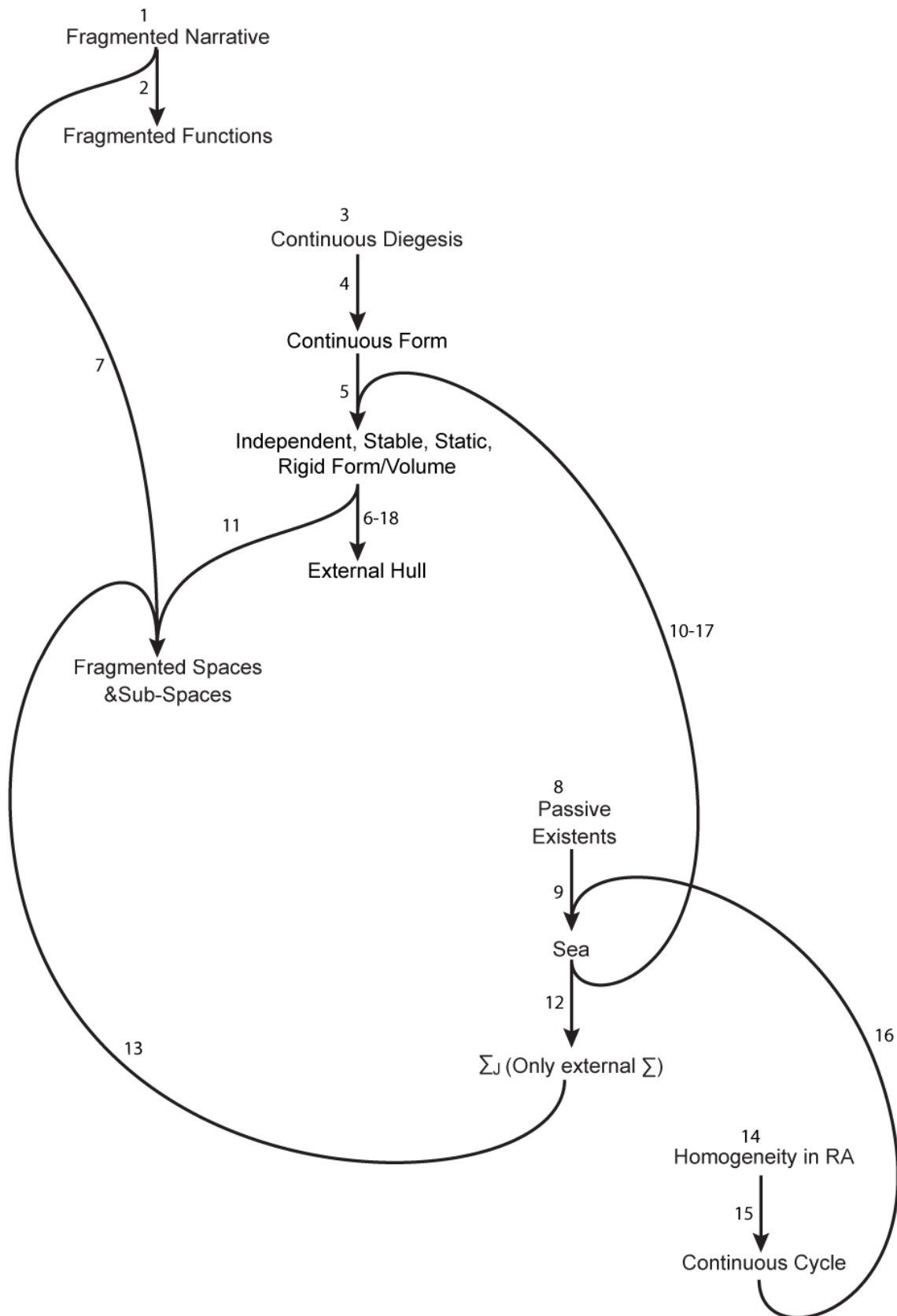


Figure 6.15 IDSD-1 (Individual Design Sequencing Diagram of Participant 1)

IDSD-3 (FIGURE 6.17 AND FIGURE 6.18)

Figure 6.17: P3 starts off by reminding the that RA has a *Fragmented Narrative* (1) and a *Continuous Diegesis* (2), thus RA being considered as a *Single Segment Divided into Multiple Narrative Syntagmas* (3). The latter are also subdivided by *Im-Signs* (4). She then wonders *How to Segment Architecture* (in a similar way to RA), and *what would the Smallest Unit in Architecture be then?* (5). Her answer to these questions is the *Im-Signs* (6) that become analogous to *Planes* (7) in architecture. And so, she continues the analogy by stating that *In Plan a Segment is similar to a Space* (8) and *Inside her building the Subspaces would be defined by Planes representing the Im-Signs* (9); the organization in *Section* (10) would also be similar to the one in *Plan* (11). At this point, P3 shifts into a new line of thoughts, by quoting a line from RA's beginning where it *Starts from the Underground*: "*I open my eyes and I see nothing*" (12), and also a line from its *Ending (with a bright view of the sea)*: "*Look... the sea is all around us, we are destined to sail forever, to live forever*" (13). P3's architectural interprets the latter quote by placing her *Building as a Cube surrounded by a Water Plane* (14), and interprets both quotes in the form of a *Circulation that Starts from the Dark Underground of the building and Ends on the Rooftop in the Light* (15). By reminding that in RA the *Narrative Progression is Non-Chronological* (16), P3 designs the latter *Circulation as Non-Linear and Irregular* (17). Finally, P3 interprets RA's *Non-Narrative Syntagmas* (18) as *Non-Functional Spaces* (19).

Figure 6.18: P3's process seems quite structured and sequential since starts by stating a group of initial FSPs relevant to her, and then proceeds to convert and analogize them into architectonic means. Thus we have that in our diagram each grouping with a pair Roman numeral is a grouping of TSP, and consequently, each odd numbered grouping, a FSP grouping.

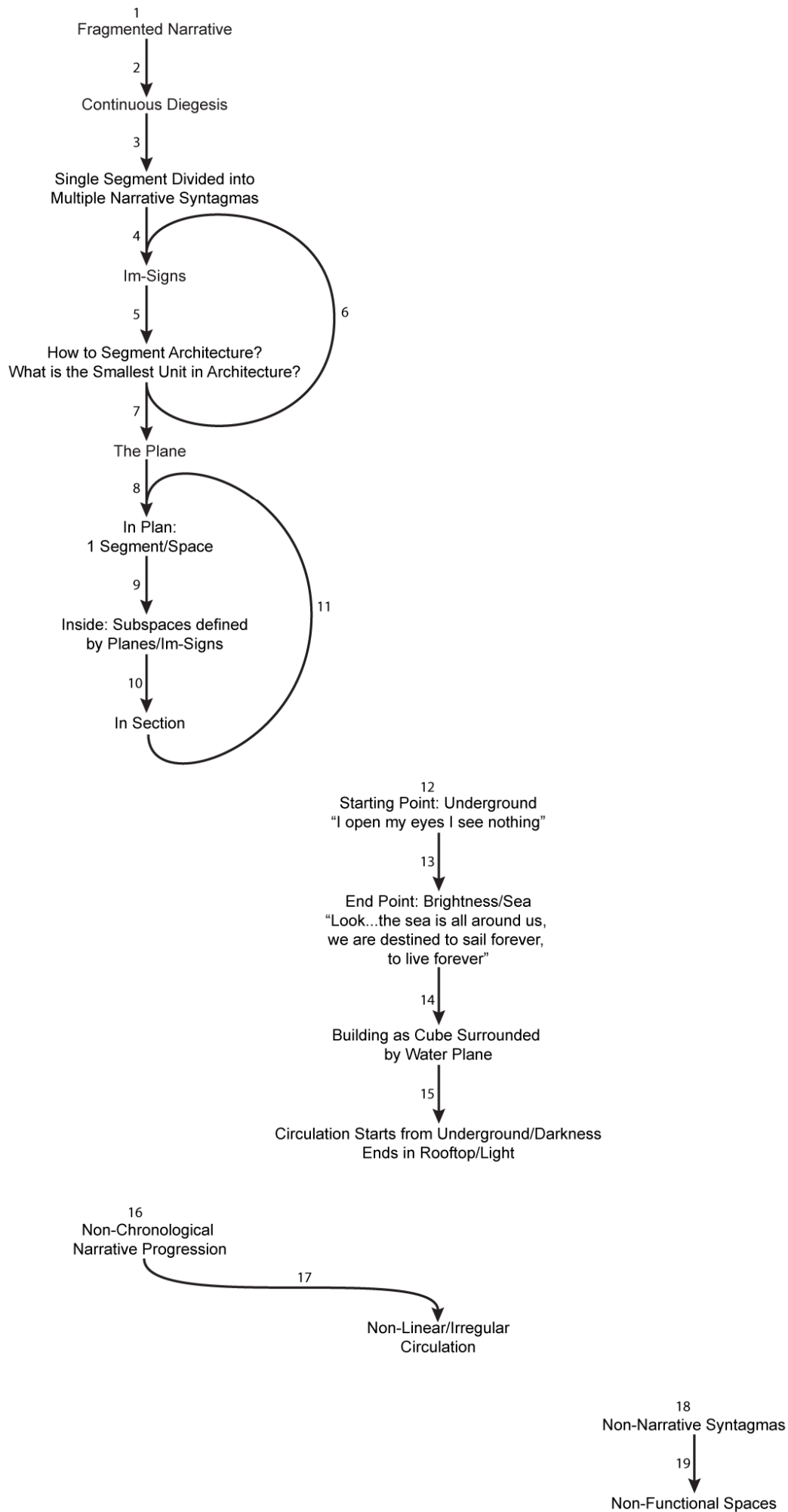


Figure 6.17 IDSD-3 (Individual Design Sequencing Diagram of Participant 3)

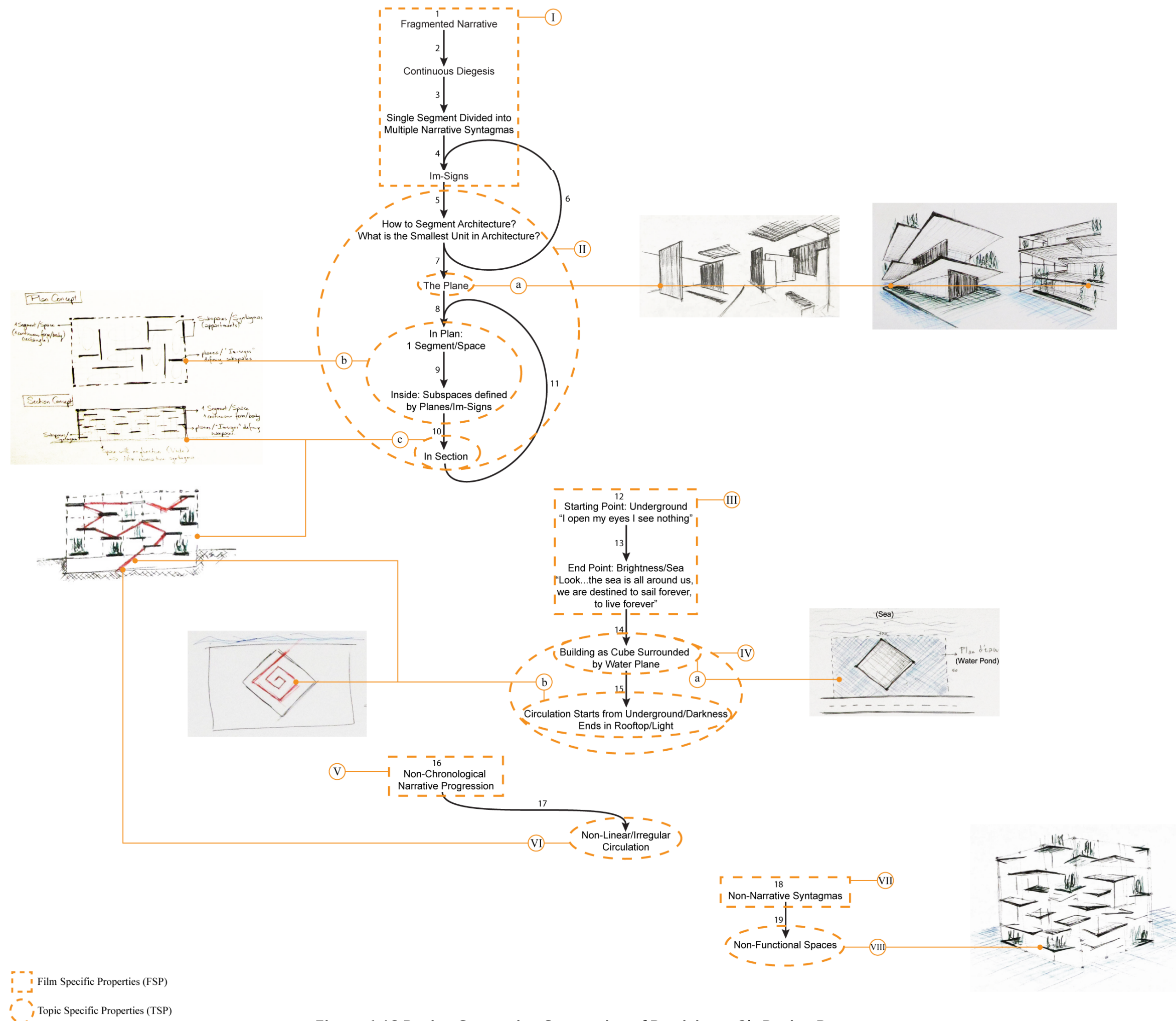


Figure 6.18 Design Generation Sequencing of Participant 3's Design Process

IDSD-5 (FIGURE 6.19 AND FIGURE 6.20)

Figure 6.19: P5 starts describing SC as a *Path Passing through Lives, and Starts from a Time t_0 and Ends at a Time t_x* (1). Then, on a completely different thread, hypothesizes that the *Families/Characters of each NE take (something) from NE and give it to another* (2); this leads to elaborating that a *NE is similar to an Architectural Entity* (3), and in consequence, there will occur *Interactions between these Entities* (4). Here P5 argues that the viewers keep *Questioning “What if?”* (5) certain narratives were developed in ways different than what is actually seen on the screen; this implies that there is *Chaos in SC* (6), a *Chaos that Passes through from t_0 to t_x* (7), while *t_0 and t_x Stay in a State of Stability* (8). P5 asserts that *SC is a Film with a Twist* (9) hence *Skewing the Building* (10) in relation with its location site. At this point, he considers that the *Viewer Imagination is in Opposition to what is offered in the Film, implying that it is equal to Perfection* (11); this leads to the concept that *Chaos should Sink Underground, while Imagination Rises Above it* (12), also interpreting *Chaos as a “Souk”, and the Imagination as Open Air Galleries* (13). The idea that *Families/Characters of each NE take (something) from NE and give it to another* is mentioned again in order to generate and integrate a new function in the Shopping Mall, a *Medical Center* (14). Returning to the concept that *Chaos should Sink Underground, while Imagination Rises Above it*, it generates new forms as an *Underground Void, for the Chaos, and a Floating Slab, for the Viewer Imagination* (15). P5 makes one more and final return to the idea that *Families/Characters of each NE take (something) from NE and give it to another* in order to generate *Interactions between the Mall and the Urban Context* (16).

Figure 6.20: As opposed to P1, P5’s design generation sequencing seems to be more structured than not; there is a clear alternation in the process between the FSP and TSP groupings. After underlining each FSP important to him, P5 proceeds to give them, or their grouping, architectural interpretations and then directly generate architectonic elements (with the exception of the grouping III where the design generation is indirect and comes much later).

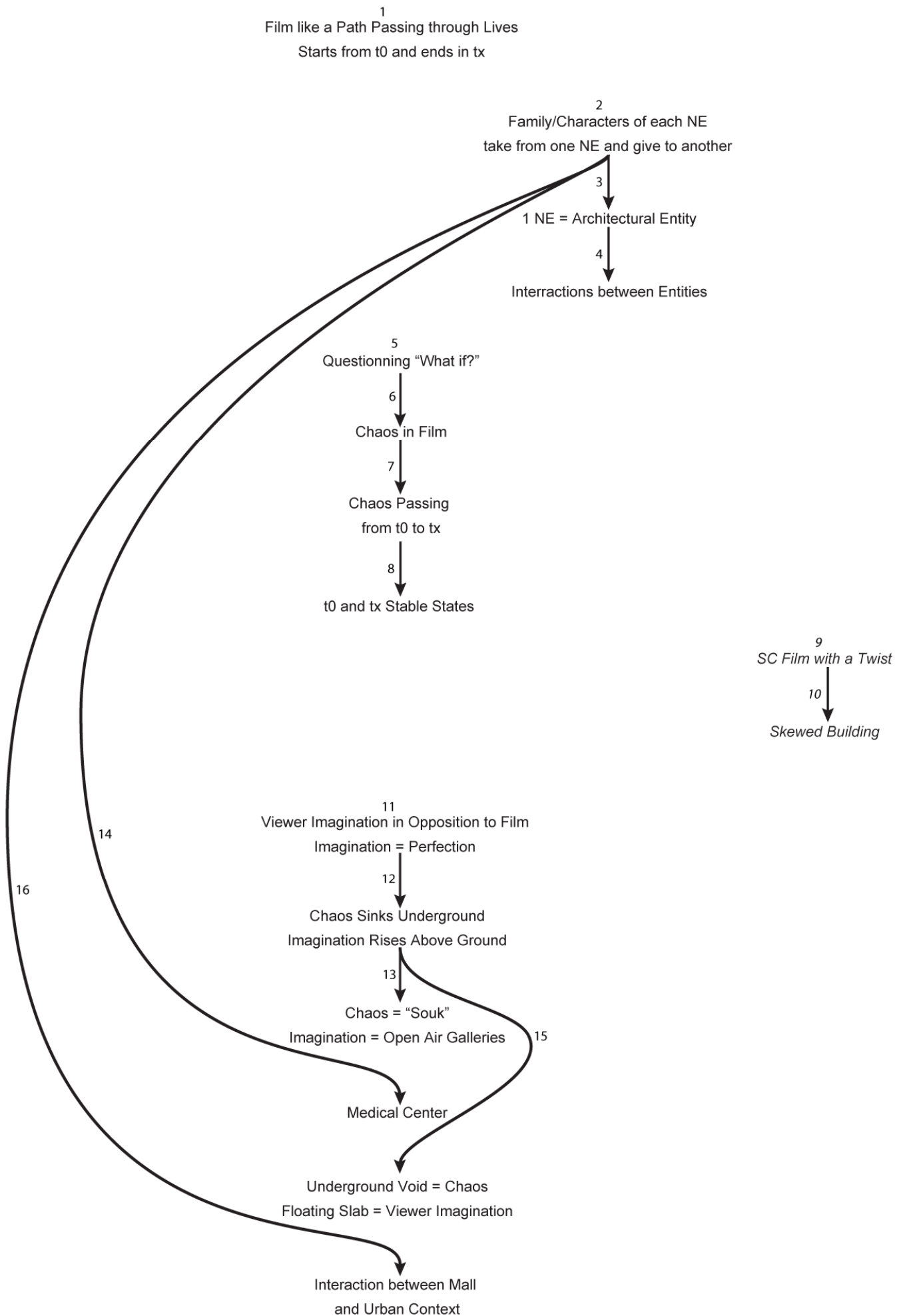


Figure 6.19 IDSD-5 (Individual Design Sequencing Diagram of Participant 5)

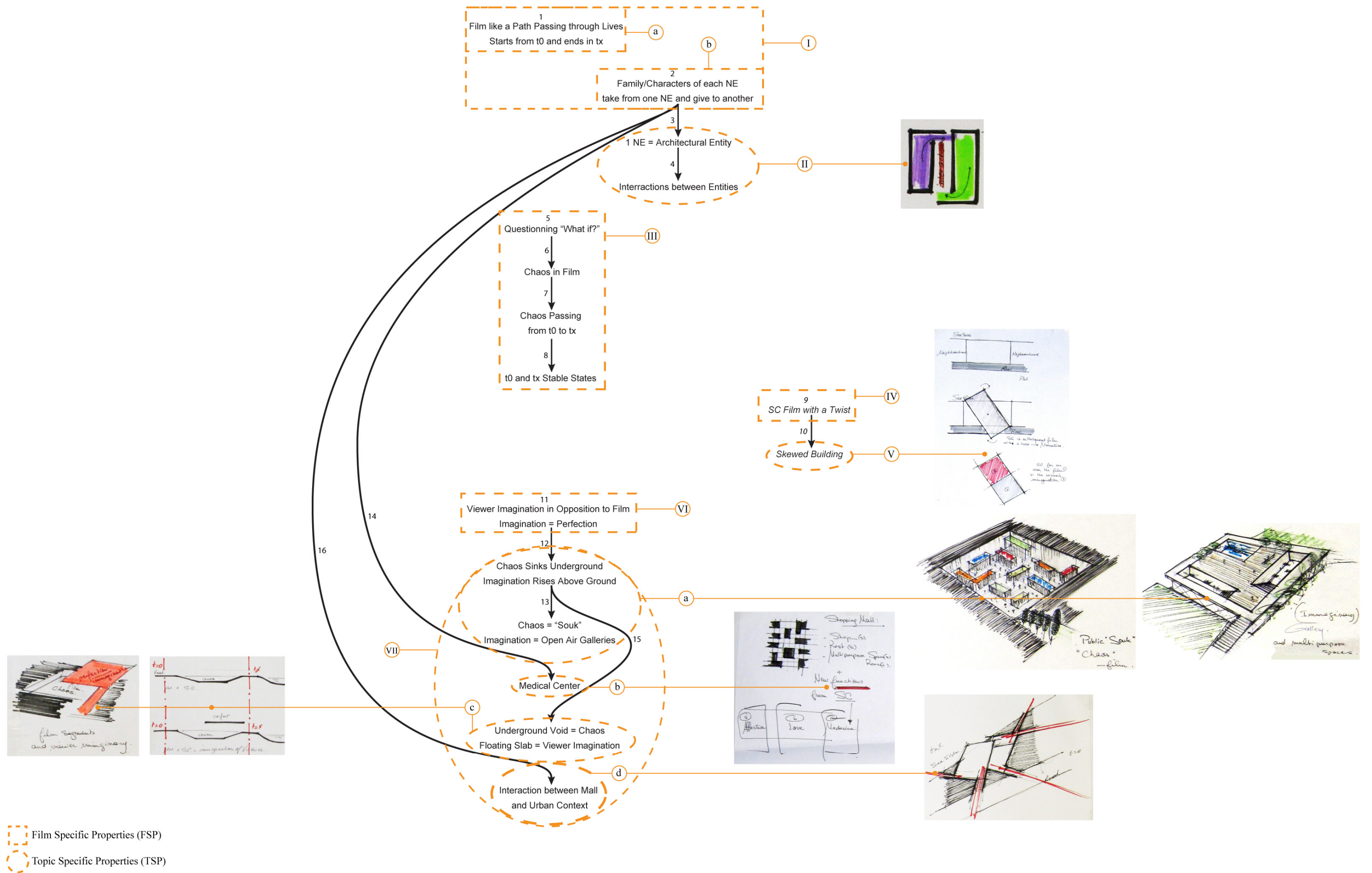
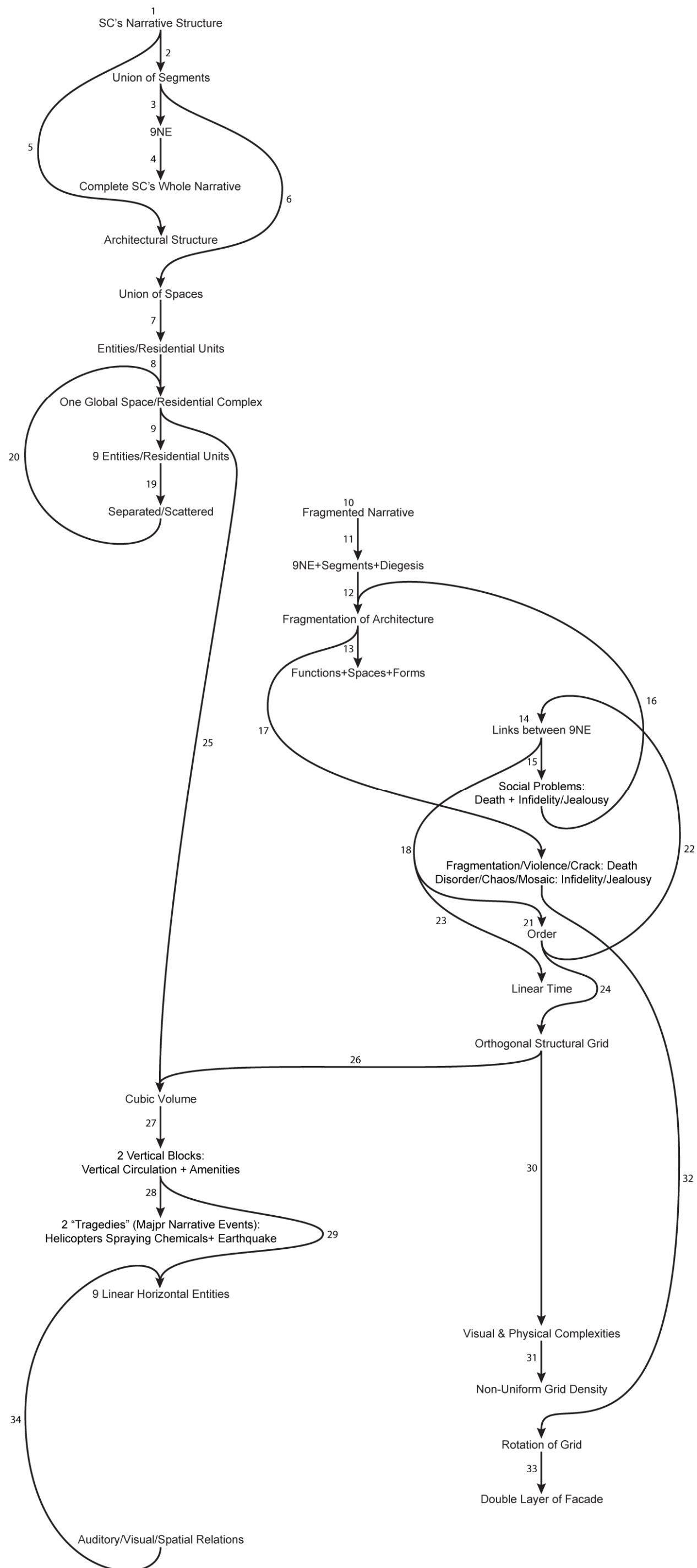


Figure 6.20 Design Generation Sequencing of Participant 5's Design Process

IDSD-7 (FIGURE 6.21 AND FIGURE 6.22)

Figure 6.21: P7 starts off by mentioning how *SC's Narrative Structure (1)* consists of *Union of Segments (2)* forming *9 NE (3)* thus *Completing SC's Whole Narrative (4)*. *SC's Narrative Structure* is then interpreted as *Architectural Structure (5)*, and consequently the *Union of Segments* as *Union of Spaces (6)* that form *Entities or Residential Units (7)* that are part of *One Single Global Space or Residential Complex (8)*. The latter is thus composed of *9 Entities or Residential Units (9)*. P7 then starts a new branch of ideas/concepts by stating that *SC's Narrative is Fragmented (10)* through its *9 NE, Segments, and Diegesis (11)*; this fragmentation is then analogized through the *Fragmentation of Architecture (12)* through its *Functions, Spaces and Forms (13)*. Another branch of concepts is then initiated with the idea of existence of *Links between the 9 NE (14)* in the form of *Social Problems such as Death, Infidelity and Jealousy (15)*, which cause the *Fragmentation of the Architecture (16)* in the manner of architectonic *Fragmentations, Violence, Cracks, Disorder, Chaos and Mosaic (17)*. P7 also interprets the *Links between the 9 NE* as being a sort of *Order (18)* that holds the NE together. P7 then goes back to the idea of the *9 Entities or Residential Units* considering them as *Separated or Scattered (19)* inside the *One Global Space or Residential Complex (20)*. Then returning back to the *Order (21)* that *Links between the 9 NE (22)*, P7 interprets this time as the SC's progressive *Linear Time (23)*. The *Order* is then architecturally interpreted as an *Orthogonal Structural Grid (24)*, and the *One Global Space or Residential Complex* in the form of a *Cubic Volume (25)*; moreover the *Orthogonal Structural Grid* is considered to give shape to the *Cubic Volume (26)*, which in turn is bounded by *2 Vertical Blocks that form most of the common functions/spaces that are the Vertical Circulation and the Amenities (27)*. The latter 2 blocks represent SC's *2 Common Tragedies (Major Narrative Events): the Helicopters Spraying Chemicals (at the beginning) and the Earthquake (at the end) (28)*. And so, the *2 Vertical Blocks* bound the *9 Entities that are Horizontal and Linear (29)*. The *Orthogonal Structural Grid* is also considered to generate *Visual and Physical Complexities (30)* that are also represented in the form of the *Non-Uniformity of the Grid's Density (31)*. Moreover, the *Fragmentations, Violence, Cracks, Disorder, Chaos and Mosaic* cause the *Rotation of the Grid (32)* thus producing a *Double Layered Façade (33)*. Finally, P7 concludes with the addition of *Auditory/Visual/Spatial Relations* that connect the *9 Horizontal and Linear Entities (34)*.

Figure 6.22: P7's process is by far the longest and most complex between the 4 participants' processes we have analyzed here. However, despite this complexity, we see a recurring pattern in the sequencing of her thoughts: similarly to P3 and P5, P7 elaborates a group of FSP concepts and follows them with their architectural interpretations, a grouping of TSP concepts.



6.5. SYNTHESIS

We remind that in this Chapter we focused more on the designs and the design processes of the *Extended Cinematics Workshop* participants rather than their analyses: due to time limitations they could not thoroughly analyze their assigned films and add additional valuable data to our own earlier analytical findings. Therefore in this Synthesis we do not take into consideration the details of Phase 2 of the workshop, but only those of Phase 3; this implies that in our development of the *Extended Cinematics* design process, we take into consideration our own analytical processes for its Analytical Phase, complemented by the participants' individual designs for its Design Phase.

The combination of the differential parameters of a case study film, architectural design topic, and participant individuality resulted in 8 unique architectural designs at the end of the design experiment. In order to develop and perfect the *Extended Cinematics* design process, we have to understand which parameters are the most influential factors of differentiation between all 8 designs. Therefore as the "participant individuality" parameter is the only parameter that we could not and cannot fully control, we put it aside in the following analyses.

In Chapter 5.6 we had introduced the generic preliminary FAADD and used it in this Chapter to analyze the participants' designs and elaborate the more specific IDDDs. These Diagrams mapped the transformation process of film into architecture on a structural level and allowed us to follow each and every film Component, branching out into Sub-Components, and then FSPs; these FSPs are then interpreted into architecture in the form of TSPs, which pave the way to complete an architectural object, as they are traced up from their architectonic Sub-Components level to the Components. In consequence, the IDDDs also allow us to reverse trace the architectonic TSPs and design elements back to their points of derivation of specific film.

By means of this mapping process, we observe that no 2 IDDDs are identical (even while having either a common film or design topic), due to the combination of the differential parameters mentioned earlier above (film and topic), which stimulate the branching of film Components and Sub-Components into FSPs and then TSPs in particular patterns.

The importance of the FSPs as architectural conceptual stimulators and/or design generators is thus highlighted thanks to the (Sub)Components Usage Pattern Charts (Tables 6.1a, 6.1b and 6.1c):

- 1- In Table 6.1a, although all 4 participants from a single group had a design topic different from each other, their (Sub)Components usage patterns have many similarities, which leads

us to hypothesize that the common film parameter has more influence on the transformation processes, than the disparate design topics;

- 2- The above hypothesis starts making more sense by looking at Table 6.1c, where the general usage pattern of each film is quite dissimilar: this dissimilarity is of course reflected in turn in the FSP, TSP and the architectural designs themselves, leading to architectural objects with dissimilarities that can be traced back the films of origin;
- 3- The above 2 points are further validated when Table 6.1b is put in comparison with Tables 6.1a and 6.1c: by looking at the participants 2 by 2, based on their common design topics, we can clearly see that their usage patterns are also dissimilar; meaning that the common design topics did not influence them enough to acquire usage patterns with discernible similarities, but it is rather the difference in their films of origin that induces the considerable distinction.

Focusing on the FSPs and TSPs now, Tables 6.2a and 6.2b give us the following information:

- 4- A single FSP can generate more than one architectural interpretation and TSP: since a single film contains a vast amount of FSP, we can have an almost limitless number and variations of architectural derivations generated from that single film.
- 5- The total number of FSPs extracted from a film can be a reliable indicator of its structural complexity: RA has 17 extracted FSPs in total, while SC has 22. Although RA is a complex film, its complexity is more audio-visual than structural like SC; as explained earlier in Chapter 4, the latter is composed of multiple (open) narratives, Existents, segments, etc. whereas the former has a simple diegetic structure with a single Fabula.

From the (Sub)Components Usability Rates depicted in Table 6.3a we observe that:

- 6- The higher the number of users of a specific (Sub)Component, the more it is central to the corresponding film.

After completing the analysis of the transformation process on a structural level, we were curious to see how these affect the actual design processes on the individual scale, thus our analysis of the generative design processes of P1, P3, P5 and P7 (or the coupling of P1/P5 and P3/P7 if we were to group them according to their common topics) represented in the form IDSDs.

The IDSDs (Figures 6.16 to 6.22) supported by Tables 6.1b, 6.2a, 6.2b, 6.3b, and 6.3c lead us the following observations and conclusions:

- 7- The difference in the amount of architectural design elements between the 4 participants is directly proportionate to the number of FSPs and (Sub)Components each of them used (3 for P1, 7 for P3, 5 for P5, and 9 for P7),
- 8- And consequently, directly proportionate to the corresponding film's structural complexity.
- 9- Out of the 3 (Sub)Components P1 used, and the 5 P5 used, only 1 (Sub)Component (*Plot*) is in common; and out the 6 P3 used and 7 P7 used, only 2 (*NS* and *Plot*) are in common. This information reconfirms the divergence in the final architectural designs is based on the difference of films.
- 10- Although the design generative process of P1 and P5 was completed with the same number of conceptual groupings (7), P1 had used 2 (Sub)Components 5 times, while P5 had used 3 (Sub)Components also 5 times: this means that P1 generated more interpretations/designs from less (Sub)Components, therefore reasserting the fact that we can have an almost limitless number and variations of architectural derivations generated from a single film,
- 11- The previous point has another implication concerning the design process itself: although *Extended Cinematics* is based on SSL which theoretically has branch-like properties, its actual design generation/transformation process has the possibility of evolving in cyclical loop forms (IDSD-1 and IDSD-7), as well as simpler sequential progressions (IDSD-3 and IDSD-5).

Based on what we had learned from IDDDs, and respecting the works of P3, P4, and P5, we add the 2 new Film Components (*Im-Signs*, and *Viewer*) and the 1 Sub-Component (*(In)Dependence of Diegesis from/on Narrative*) they had themselves used in their design processes, to our preliminary FAADD, in addition to the corresponding Architectural analogies they had defined them by. We do this for the following reasons:

- The addition of *Im-Signs* is based on valid semio-linguistic theories⁵, and although their analogous "Spa-Signs" are not based on thorough analytical results, their definition, according to P3 and P4, is originated from the De Stijl movement's definitions of minimal architectonics units of space composition. Therefore, to fill in our lack of not finding film Components that satisfy the latter analogy, we adopted the *Im-Signs/Spa-Signs* interpretation, as is.
- The concepts of *Viewer/User* and *(In)Dependence of Diegesis from/on Narrative/(In)Dependence of Form from/on Function* had direct non-negligible

⁵ Ref. Chapter 2.2.2.

influences on the interpretations, processes and final designs of P4 and P5; therefore we consider these interpretations and analogies as existing on the (Sub)Componential levels of film and architecture as they were, and can be interpreted in ways specific to the latter both.

Thus, the preliminary FAADD evolves into the Developed FAADD that reflects better the structural transformation process of Narrative Film into Architecture (Figure 6.23).

Finally, looking back again at the IDSDs, we remind that the differences between them are due to the fact that they trace the design process and idea generation processes alone (which both are highly dependent on the individuality of the participants); and although they both progress differently, they have the common analytical process of Structural Semio-Linguistics and our established film-architecture analogies (but not the FAADD in the form presented in this dissertation) as a starting point. That is why both participants were successful in interpreting and transforming their extracted FSPs into architectonic TSPs, and synthesizing them into architecture.

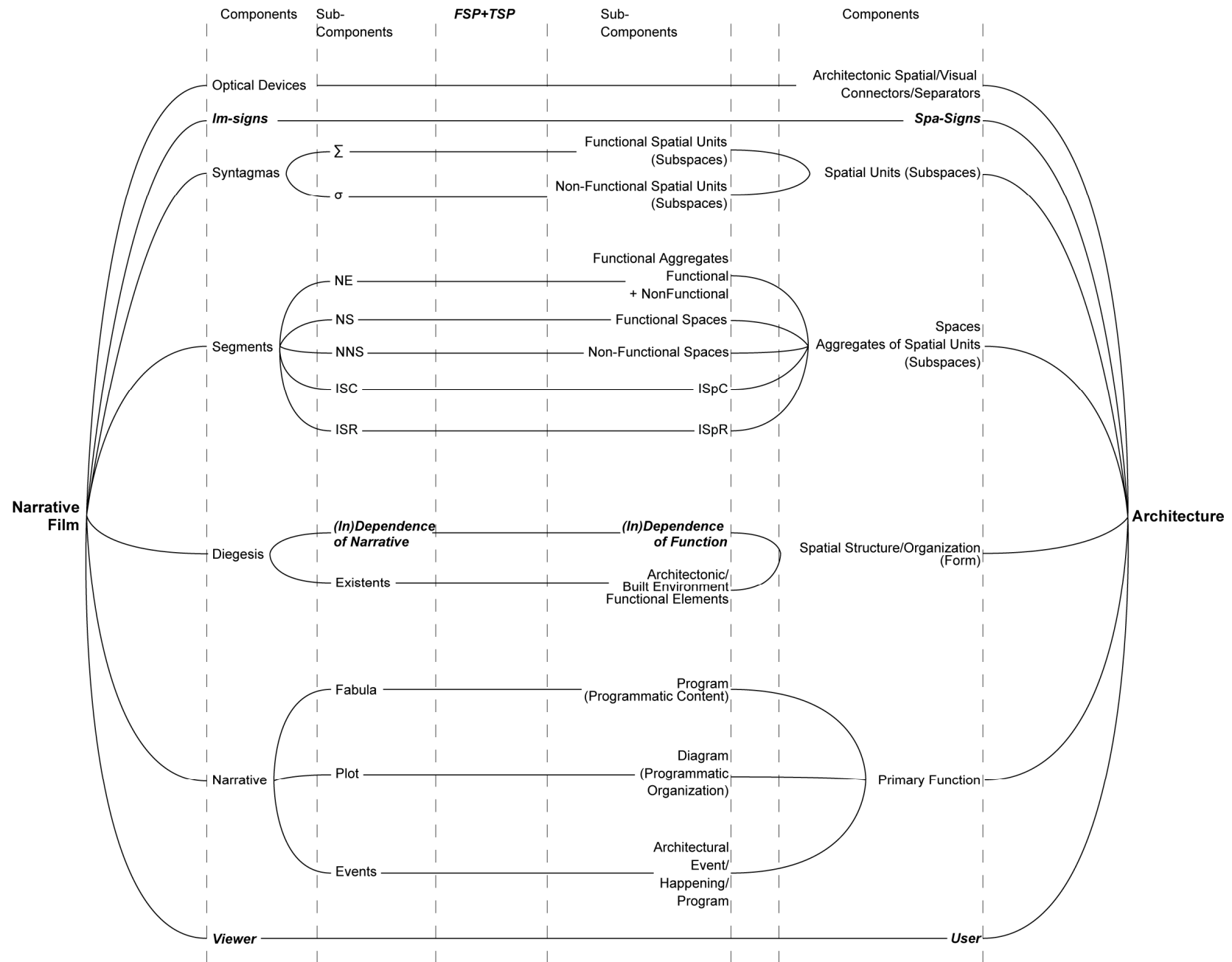


Figure 6.23 Developed Film-Architecture Analogy Derivation Diagram (FAADD)
The newly added elements are in ***Bold Italic*** letters.

CHAPTER 7

CONCLUSION

In this dissertation, and Chapter 2 specifically, we clarified the distinctions between Cinema, Movie and Film, which are summarized as: *film* (or a *movie*) is to *cinema* what a novel (or a book) is to literature. We have also introduced in the same chapter, Structuralist Semio-Linguistic approaches to film analysis as the basis of our research.

In Chapter 3, we presented the Architectonics of Narrative Film and defined them as: Narrative, Fabula, Plot, Events, Diegesis, Existents, Syntagmas, Segments, and Optical Devices. We then structured these Components and Sub-Components in a Preliminary Model of Film Structure.

By completing these theoretical sections we set the basis for the following exploratory and analytical works developed in Chapters 4 and 5.

In Chapter 4, we concluded that actual architectonic elements from *Hermitage's Winter Palace*, which are denoted instances in the film, regulate, structure and give shape to the segments and Diegesis of *Russian Ark*. This meant that actual architectural Spatial Units, depending on their arrangement, numbers and correlations, could be considered analogous to Syntagmas and Segments, while their Organizational Spatial Structure was analogous to the Diegetic Spatial Structure.

We had also concluded that since Narrative is the substantial dimension of Narrative Film, it could be similar to the substantial dimension of architecture, i.e. Program (or Primary Function); consequently the Narrative Organizational Structure, or Plot, would become similar to the Programmatic Organizational Structure of architecture.

In Chapter 5, by analyzing *Short Cuts*, we uncovered and classified 5 types of Inter-Segmental Connections (ISC), and 3 Intra-Segmental Relations (ISR), which were as follows: Auditory Connections, Iconic Connections, Thematic Connections, Verbal Connections, Non-Identified Connections, Auditory Relations, Spatial Relations, and Visual Relations.

We understood that the ISC, other than playing the role of buffers for viewers, bridge syntactic film cuts and diegetically connect the multiple differential segments of *Short Cuts*. As for the ISR, they link multiple Existents, which belong to different NE, to each other on different levels.

The closure of these 2 analytical Chapters was the apprehension of the analogies between (the Components and Sub-Components of) the Architectonics of Narrative Film and the Architectonics of Architecture, and their arrangement in a Preliminary Film-Architecture Analogy Derivation Diagram (FAADD).

In Chapter 6, we introduced the *Extended Cinematics Workshop*, a 5 days-long intensive workshop where our hypotheses of Film-Architecture transformations were tested out in the

designs of 8 architecture students; the main focus of this Chapter however were the thorough analyses we conducted on the students' designs and processes.

The first of these analyses was a mapping process that surveyed the transformation of films into architectural objects. This was based on the FAADD that gave us in turn the Individual Design Derivation Diagrams (IDDDs) of each participant and then the Total Design Derivation Diagrams (TDDDs) of each film: all these Diagrams lead us to evolve the FAADD from a preliminary one to a more developed one.

The second of these analyses was conducted through charts based on the IDDDs and TDDDs, which studied the usage patterns and frequencies of Narrative Film Components and Sub-Components and led us to conclude that by undertaking a film-to-architecture transformation process from a Structuralist Semio-Linguistic approach, film (Sub)Components in general, and Film-Specific Properties (FSPs) in particular, are crucial in generating architectural designs.

The third and final analysis consisted of mapping of the Design Generation processes of 4 representative participants as a means to understand the sequential development of their designs derived from film. This mapping was developed in the form of the Individual Design Sequencing Diagrams (IDSDs) where we had located the first appearances of concepts/ideas that either directly or indirectly led to the generation of architectural designs. These IDSDs led us to conclude that the complexity of the design generation process is relative to the complexity of the film of origin, and that it is not necessarily as linear and sequential as the structural transformation process it is based on.

And so, from this experiment we conclude that the *Extended Cinematics Design Process* does not consist solely of a design phase, but it is a process of a larger scale that also includes an analytical phase that is based on our FAADD.

Having accumulated a sufficient background, demonstrative proof, experimental and analytical results, we assert that *Extended Cinematics* has a wider meaning of design process attached to it. One of the most crucial elements we have developed in our research and presented here in our dissertation is the FAADD that lists the analogies between Narrative Film and Architecture in a clear and structured way. As the design processes of the participants had our preliminary non-structured Film-Architecture Analogies as a basis for their designs, their processes were similarly non-structured. Therefore, having developed the more structured FAADD (Figure 6.23) in the course of our dissertation, we aim for it to become the central and essential tool to be used by architects to 1) analyze Narrative Films, 2) extract their FSPs and then 3) passing through a phase of Analogical Reasoning, generate disparate Architectural Signs (designs) that correspond to 4) the architectural interpretations that are the TSPs, and finally 5) gather, collect

and Synthesize them all following the Architectonics of Architecture in order to 6) finalize their designated specific Architectural Design Topic(s) (Figure 7.1).

And thus *Extended Cinematics* becomes this whole process of Narrative Film Analysis – Extraction – Interpretation – Architectural Design centered on the FAADD. Moreover the structured presentation of the FAADD should enable architects to approach it with more ease of understanding, for adoption and use.

We have to specify and emphasize also that *Extended Cinematics* is a process that is not necessarily a sequential one, meaning that it is not a closed linear system: designers can at any point of their progress return to a previous step and modify its contents in case they are either not pleased with the generated results. Furthermore, this returning action can even go as far back in the process as to reach and question the choice of the film: in this extreme situation, designers unsatisfied with the generated interpretations, and determining that the problem lies in their choice of film (which has an inappropriate structure for their assigned project, for example), can easily drop it and try to find another one they judge more appropriate for their topic; and then naturally, go through the process again.

In conclusion, in this dissertation, we have deepened our understanding of Narrative Film enough to learn what makes it powerfully charged on the structural and meaningful levels. By applying the findings in architectural conception and design through a design experiment, we have also demonstrated that Architecture derived from Narrative Film does not remain constrained solely to functional, utilitarian and aesthetic parameters, but it becomes *Extended* with the significant structural and semantic properties of Narrative, Diegesis, Segments, etc. (or else the designs of the participants with a common design topic would have had more similarities than what had been actually accomplished).

Narrative Film as we have seen, can enrich architectural conception and design; and by using our established bi-directional Film-Architecture Analogy Derivation Diagram, there is also a potential of rendering the apprehension of existing architectures more accessible to the larger public by a constant reflection of their possible analogies with Narrative Film. As this subject of “simplification” of architecture through film starts to stimulate us more and more, we look forward to tackle it as a future task and develop it in the near future.

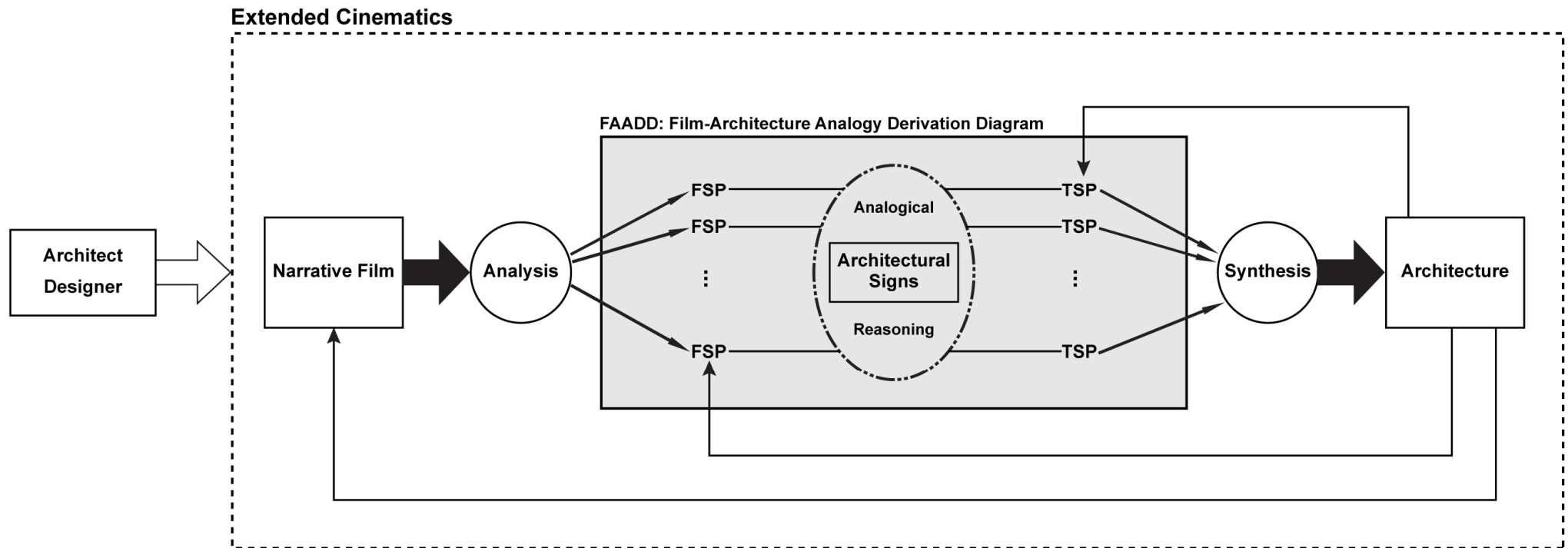


Figure 7.1 Extended Cinematics Complete Process Diagram

With the help of *Extended Cinematics* and the FAADD, Architects can 1) analyze Narrative Films, 2) extract their FSPs and then 3) passing through a phase of Analogical Reasoning, generate disparate Architectural Signs (designs) that correspond to 4) the architectural interpretations that are the TSPs, and finally 5) gather, collect and Synthesize them all following the Architectonics of Architecture in order to 6) finalize their designated specific Architectural Design Topic(s).

FSP: Film Specific Property(s)

TSP: Topic Specific Property(s), or Architectural Interpretation(s)

LIST OF PUBLISHED PAPERS

1. *A Search for Architectonic Spatial Connections and Functional Relations in Narrative Film: Case Study of "Short Cuts", *Journal of Architecture and Planning, Transactions of AIJ*, Vol. 76 No. 670, December 2011. (In print)
2. Extraction of Architectonic Spatial Structures and Relations in Narrative Film: Case Study of *Short Cuts*, *Architecture Institute of Japan, National Annual Meeting*, 2011.
3. Extended Cinematics Workshop: Introducing a Design Process Based on Architectural Interpretations of Narrative Film Structures (A Preliminary Report), *Architecture Institute of Japan, National Annual Meeting*, 2011.
4. *A Search for Architectonic Spatial Structures in Narrative Film: Case Study of "Russian Ark", *Journal of Architecture and Planning, Transactions of AIJ*, Vol. 76 No. 660, pp. 341-351, February 2011.
5. *From Film to Architecture: Toward a Design Methodology for Architectural Interpretations of Narrative Film, *DesignEd Asia, Conference Proceedings*, Hong Kong, December 2010.
6. Preliminary Analysis of the Spatial Organization of *Kitakami Sakura Hall*: A Comparative Analysis of Architecture and Film on the Spatial and Narrative Organizational Levels, Part 1, *Architecture Institute of Japan, National Annual Meeting*, 2010.
7. Preliminary Analysis of the Spatial Organization of *Kitakami Sakura Hall*: A Comparative Analysis of Architecture and Film on the Spatial and Narrative Organizational Levels, Part 2, *Architecture Institute of Japan, National Annual Meeting*, 2010.
8. A Comparative Analysis of Architecture and Film: Case Study of *Kitakami Sakura Hall* (Cultural Center) and *Short Cuts* (Film), *Architecture Institute of Japan, Kinki Branch Annual Meeting*, 2010.
9. A Comparative Analysis of Architecture and Film from a Semiotic Viewpoint: Case Study of "Yokohama Osanbashi" (International Ferry Terminal) and "Russian Ark" (Film), Part 1, *Architecture Institute of Japan, National Annual Meeting*, 2009.
10. A Comparative Analysis of Architecture and Film from a Semiotic Viewpoint: Case Study of "Yokohama Osanbashi" (International Ferry Terminal) and "Russian Ark" (Film), Part 2, *Architecture Institute of Japan National Annual Meeting*, 2009.

* Refereed Paper.

11. A Comparative Analysis of Architecture and Film: Case Study of “Yokohama Osanbashi” (International Ferry Terminal) and “Russian Ark” (Film), *Architecture Institute of Japan, Kinki Branch Annual Meeting*, 2009.
12. One Film / One Architecture: Definition of Space in Cinema and its Reinterpretation into an Architectural Space, *Japan Bi-annual Design Symposium, Keio University*, 2008.

APPENDIX
EXTENDED CINEMATICS WORKSHOP
PARTICIPANTS' PRESENTATIONS TRANSCRIPTS
AND COMPLETE ORIGINAL WORKS

In this appendix we lay out the transcriptions of the presentations conducted by the participants in Phase 2 and Phase 3 of the workshop.

We also attach the complete analysis and design sheets of Groups 1 & 2, and Participants 1 through 8, following each of their presentation's transcripts.

PARTICIPANTS AND ATTENDEES OF THE PRESENTATIONS

P1 (PARTICIPANT 1): Mariella Tannouri – Architecture Student– 5th year – RA – Shopping Mall

P2 (PARTICIPANT 2): Elie Tannous – Architecture Student – 5th year – RA – Cultural Center

P3 (PARTICIPANT 3): Hiba Tawk – Architecture Student– 5th year / Film Studies – 2nd year – RA – Residential Complex

P4 (PARTICIPANT 4): Carine Arab – Architecture Student– 5th year – RA – Ferry Terminal

P5 (PARTICIPANT 5): Toufic Matta – Architecture Student– 6th year – SC – Shopping Mall

P6 (PARTICIPANT 6): Sally Hanna – Architecture Student– 6th year – SC – Cultural Center

P7 (PARTICIPANT 7): Mireille Younes – Architecture Student– 6th year – SC – Residential Complex

P8 (PARTICIPANT 8): Mehzen alAraigy – Architecture Student– 6th year – SC – Ferry Terminal

R: Richard Douzjian – Author of Dissertation – Supervisor and Organizer of the Workshop

J: Joseph Housny – Teacher in Film Studies – Assistant Organizer of Workshop – Attended the presentation of **P5** only

E: Elie Tohme – Dean of the Faculty of Fine and Applied Arts – Organizer of Workshop – Attended the Student Design Phase Presentations

S: Samir Saddi – Architect – Guest Lecturer at the HSUK - Attended the Student Design Phase Presentations

Z: Zafer Sleiman – Head of the Architecture Department at the HSUK - Attended **P1** and **P2** Presentations only

Note 1: The texts between brackets are added by the author for better clarifications of any ambiguity from the original verbal presentations.

Note 2: Due to a personal emergency, Participant 8 didn't actually give a presentation of his designs; he rather emailed us a description (which wasn't very thorough) of his design process.

Note 3: The size of the original analysis and individual design sheets was A1; therefore the attached works in this Appendix are actually scaled down versions.

TRANSCRIPTIONS OF THE ANALYSIS PHASE PRESENTATIONS (17-03-2011)

GROUP 1 (G1): RA

VIDEO FILE: DAY-4-1-ANALYSIS PRESENTATIONS.M4V

TIME: 01:48:52-02:03:42

G1: (PAGE 5 OF PRESENTATION SHEETS) We started with Metz's structure that you introduced to us, where he states that narrative film is composed of 4 elements: Narrative, Diegesis, Segments and Codes. We tried to modify these a little bit - with all due respect to Metz - by doing an analogy between film and architecture. Since narrative represents function in architecture, diegesis represents form - since diegesis is the audio-visual world - and narrative is the message, or what we try to infer from those audio-visual signs, so it's the function; and the relations between the 2 (narrative and diegesis) are the codes. Narrative is divided into 2: Fabula and Syuzhet. Fabula represents Program in architecture and Syuzhet the Diagram.

(Page 6) Segments represent space in architecture, and the common thing in film and architecture is that they both have a sort of third dimension: narrative and diegesis are joined together in the common ground of segments, and in architecture form and function are joined in space.

We categorized the general ways segments, narrative and diegesis work together, and they are:

- 1- Fragmentation of narrative and diegesis: each time there's a cut, both change together, like in SC.
- 2- Continuous narrative, continuous diegesis: such as the theory of Andre Bazin who talks about "objective reality" or "true continuity".
- 3- Fragmented narrative, continuous diegesis, like RA.
- 4- Continuous narrative, fragmented diegesis, like Eisenstein's "Montage of Attraction".

In our case of RA then we have "fragmented narrative, continuous diegesis".

(Page 7) And based on the earlier analogy, we have a fragmentation of narrative that gives a fragmentation of functions in architecture, while a continuity of diegesis gives us continuity in form.

So how to conceive a fragmentation in function although having a continuity in form? We therefore need the characters in the film and the image to define the syntagmas, leading us to use Pasolini's concept of "im-signs" in order to achieve this fragmentation. So the im-signs in architecture become architectonics elements/objects in space, "spa-signs".

(Page 8) At this point we tried to find links between the im-signs and a way to interpret them in architecture, and find links in space, links between spaces.

Looking at things from the point of view of a spectator and not an analyst, we understood that a spectator instead of consciously perceiving segments and creating links between them, he focuses more on the characters and thinks back about where and when he saw them in the film or also by noticing repeated words, or visual elements, etc. So we considered these as our im-signs. As an example of a Thematic link, in the 21st century art gallery segment, the smell of an odor was mentioned a couple of times and a talk about mummification and formaldehyde; this talk about odor was mentioned again in the segment where the European is in front of the Peter&Paul painting and smells an odd smell reminding him that of death. Then another example, while talking in the 21st century gallery again, he criticizes the display of religious paintings, and then again with the Peter&Paul painting the same critique comes up. We defined these in their corresponding Narrative Segments (NS) then.

(Page 9) Again, the camera-figure utters “Sir leave her she’s an angel” to the European in one segment, while in segment the European describes the ex-ballerina as an angel, etc. So this Thematic link goes on in some other NS also.

(Page 10) As for the spatial links, we considered that the characters can represent this, just like the segments are centered around them, when some of them move around from one space to another, they create a sort of a spatial link between the spaces they were in. These characters are: the Weird Old Man, the Blind Woman, the Weird Young Man, the Nun, Young Catherine and Old Catherine with her butler. These characters with their movements are then defining spaces just as they are defining the NS. We also specified the segments they were in:

- Weird Guy: spaces 2 (a NNS), 3 (a NNS), 6, 8 (a NNS), etc. and NS_D, NS_E, etc.
- Young/Old Catherine: in the theater scene in the beginning, and then when she goes out in the garden, after becoming Old Catherine.
- Etc.

So all these characters refer back to spaces, and we checked spaces they belong to.

(Page 11) As for the Iconic links, while talking to the Talented Boy, for example, the topic discussed was about religion, and then in the segment following it – the one with the Ex-Ballerina – the Nun appears for the very first time. Another example is when Young Catherine is looking the window wishing to go out, and then many segments later, her Old version actually goes out; so we considered this as an Iconic link.

(Page 12) And here we made a diagram of all the NS and the links between them. The double line means the Thematic link occurred twice. As for these (the circled letters in the center) they represent the characters and the spatial links they generate.

(Page 1) Other ideas we had were about dualities in RA. This page is just some basic analysis we did, and ideas we put down understanding camera movements, structures, etc.

(Page 2) We tried to see here when were the European and the Russian (the camera-figure) seen and unseen, and if there were any reason for these happenings, because we noticed they sometimes they were both unseen, and most of the time the former was seen while the latter was not; but we couldn’t find anything clear.

There was also a continuous conflict between them both: the European always trying to prove that Russian is just a copy of European art.

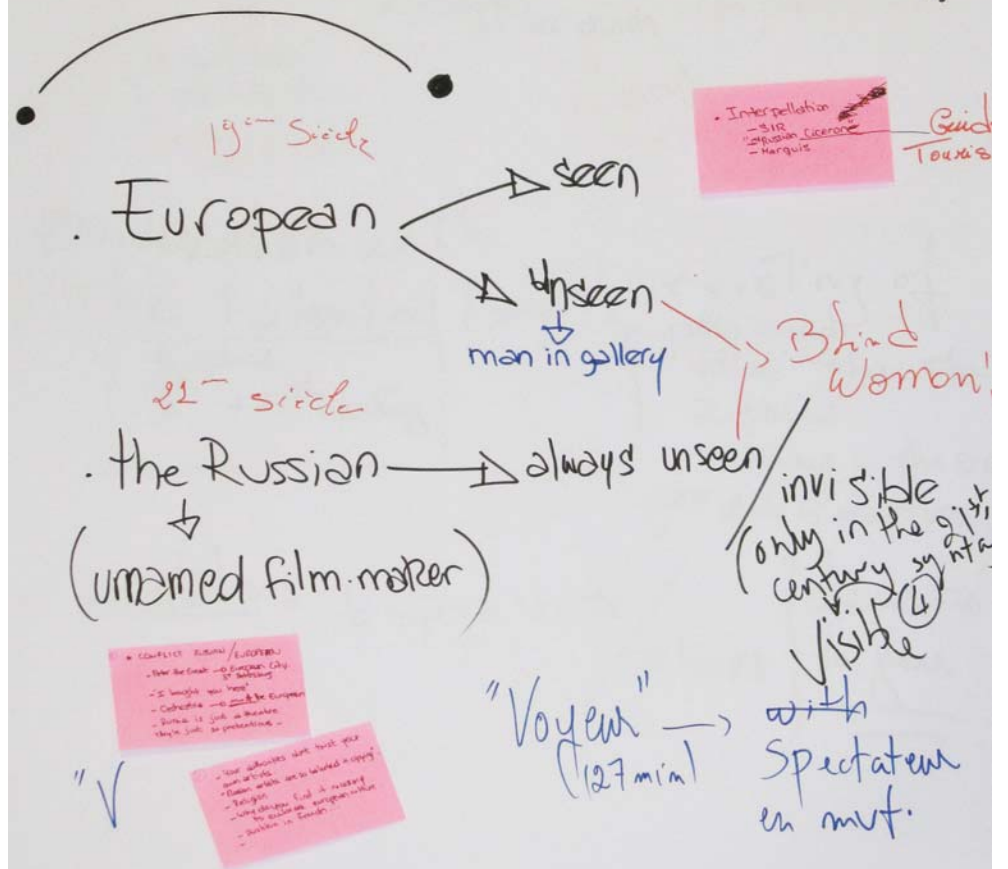
(Page 3) The dualities appeared to us when we noticed the difference how religious the Russian was and non-religious the Talented Boy, a 21st century Russian, was, by liking a painting just for the aesthetics and not the religious beliefs. And here the characters moving from one scene to another.

(Page 4) This was our first conclusion, the dualities between seen and unseen, European and Russian, and empty and filled spaces – meaning the impression the camera gives us when it moves in a space depending on architectonic elements, characters or artworks. And also thought a little about the costumes and how they also define eras. But that’s it. After this we had newer ideas and moved on to what we presented in the beginning.

End of Presentation

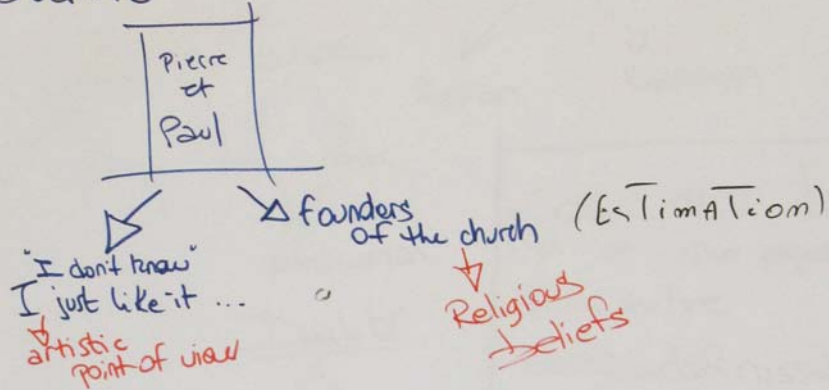
①

2. Delimitation and designation of narrative syntagms—
- TIME TRACK / HISTORICAL PERIOD / Description of syntagms—
3. Composition and Space / Time delimitation of N.S
- ↓
narrative
syntagms



3

→ Dualité Culturelle

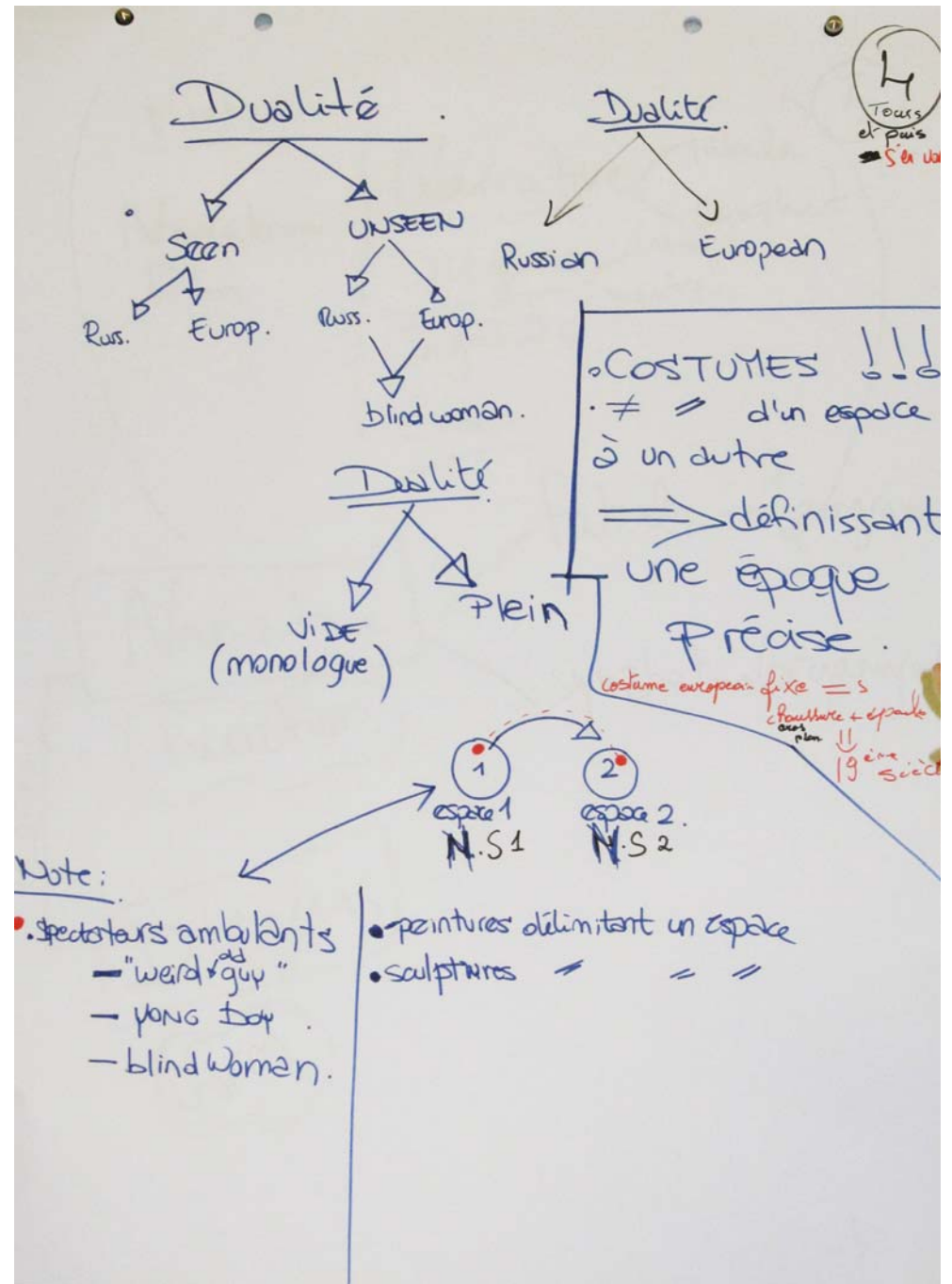


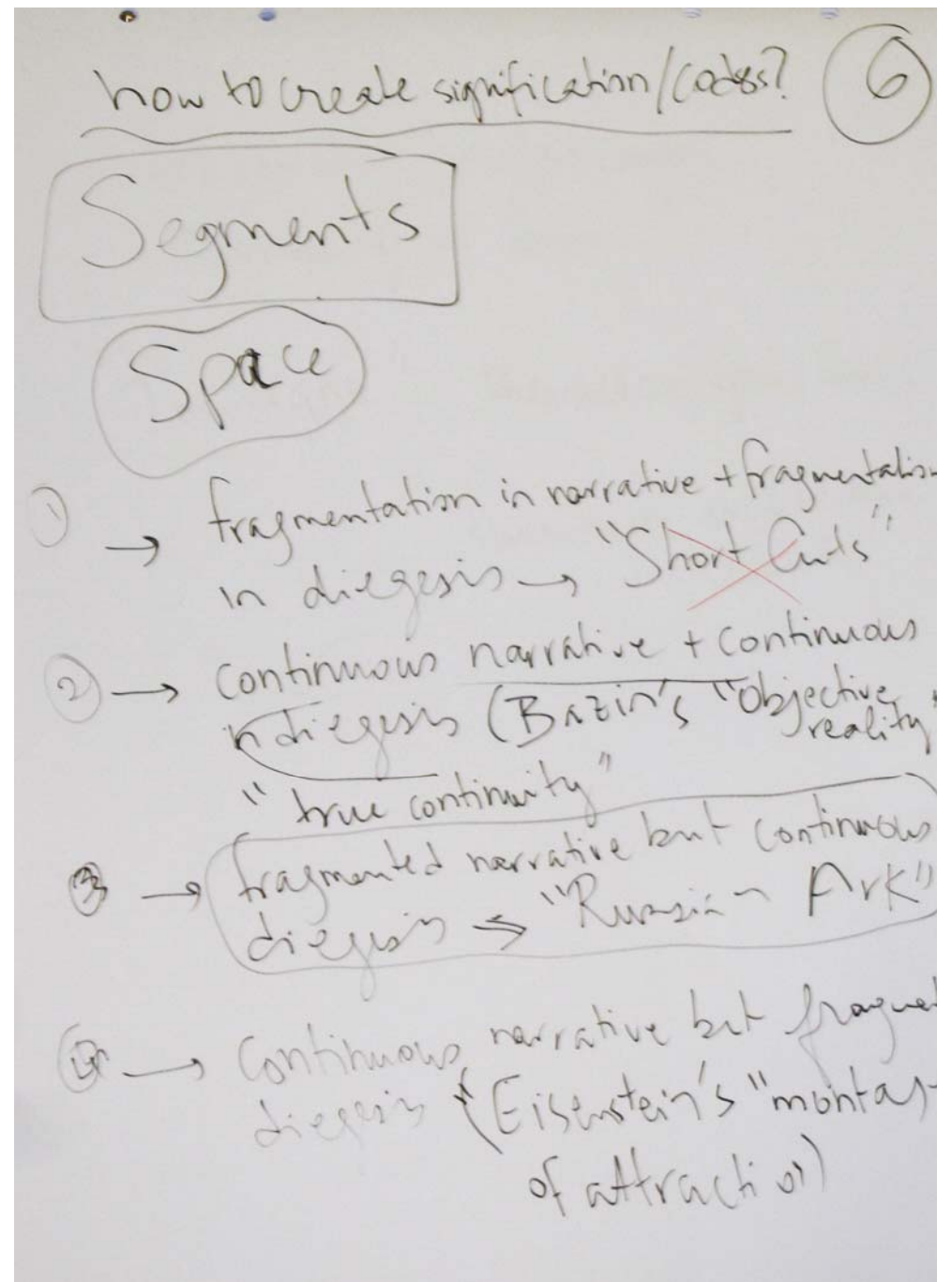
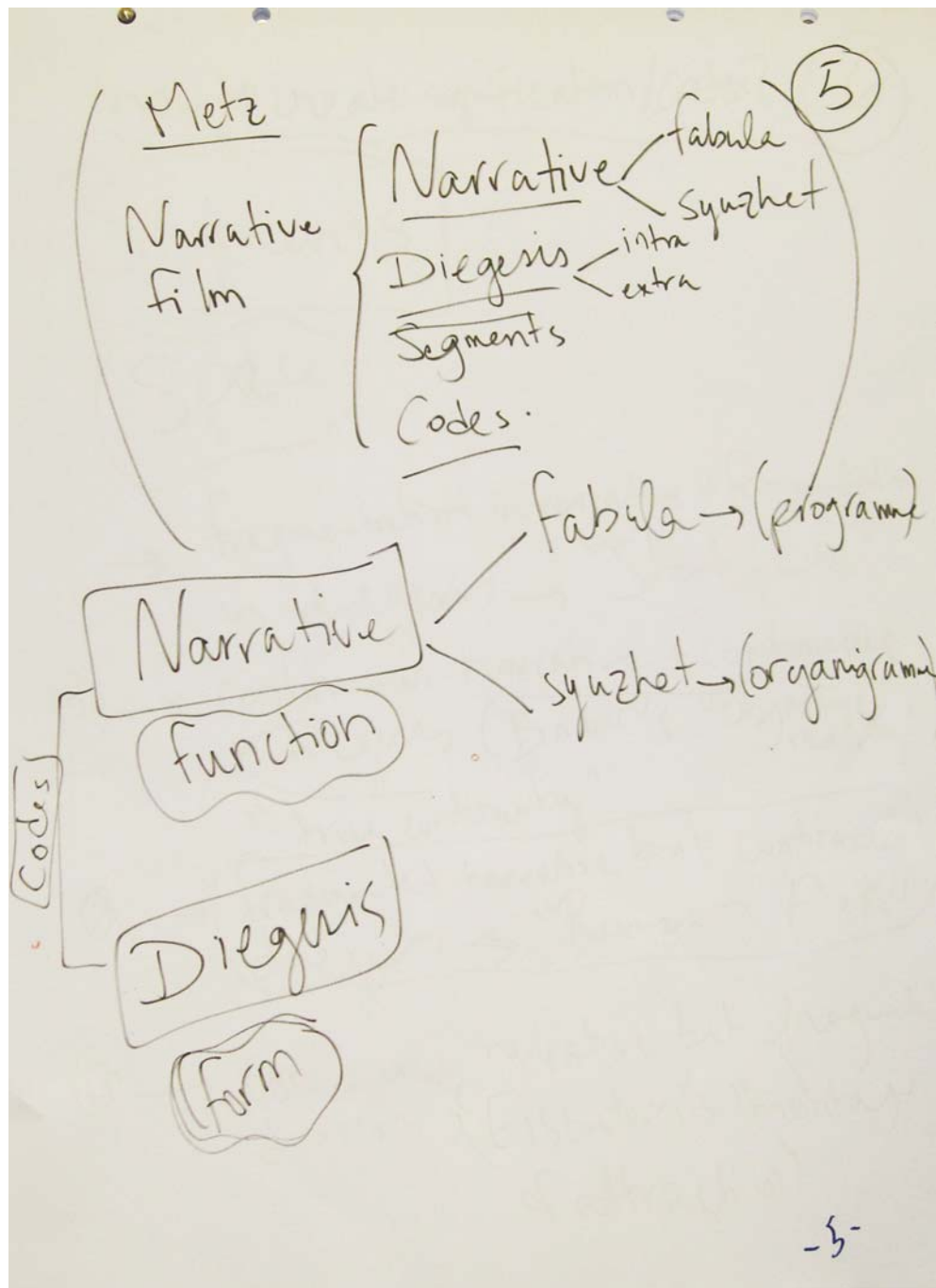
Conversation with The talented boy

2 epochs
19th + 21st century

existing of
personage
other than the
2 prime.
moving in the scene
from N.S to another

- Dualité : Espace vide / Plein. } densité de gens





fragmentat° in function
Continuity in form

"Im-signs" characters, space limits
furnitures, architectural
elements

Thematique link

What is that odour?

It smells like ... (21st century)
gallery

NSc

It smells good

(St Peter and St Paul)
Painting

NSF

Cleopatra and Massimo

Paintings ~~are~~ next to
each other

— "as a catholic that"
chocks me

NSc

NSF

Conversation with the
talented boy

Yong Catherine in the cold

NSI

World War II cold room

NSI

Sir leave her
She's an angel

NSE

(9)

There is an angel
(the ex-ballerina)

NSG

fire (conversation with
the blind lady)

NSE

when u 1st came here
It must have been
disaster
That was just after the
fire

NSH

Spatial Links/connections:

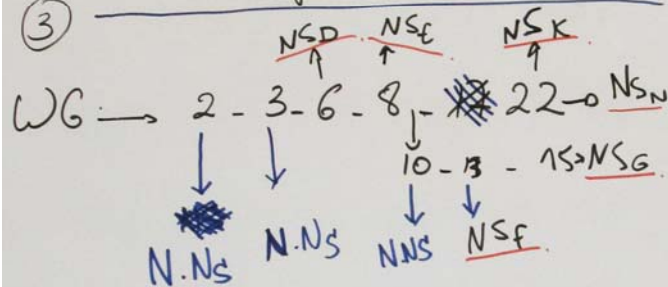
(12)

②: WG / E / R

perpetual

weird old Guy: WG

③



Blind woman: BW

weird young man: WM

nono: N



Young Catherine: Y.C

BW → 8 - 9 → NSE

WM → 10-11 - 8-9 → NSE

N → 15 - 27

↓ ↓

NSG NSH

NSH

Y.C → NSG - 18-19

NSG

④ N.B: Mariella
a7La 3alam
cic Perjan

Iconic Links:

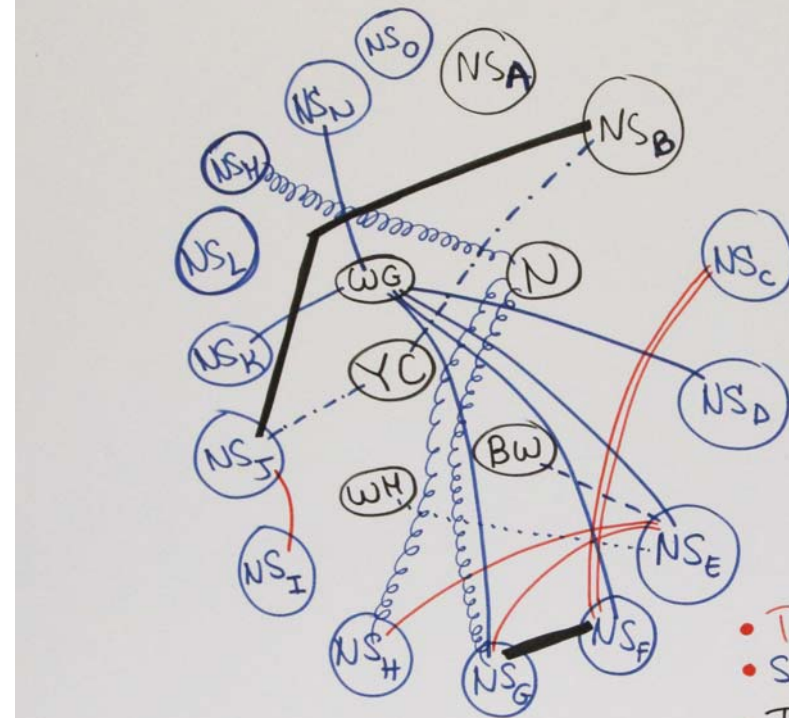
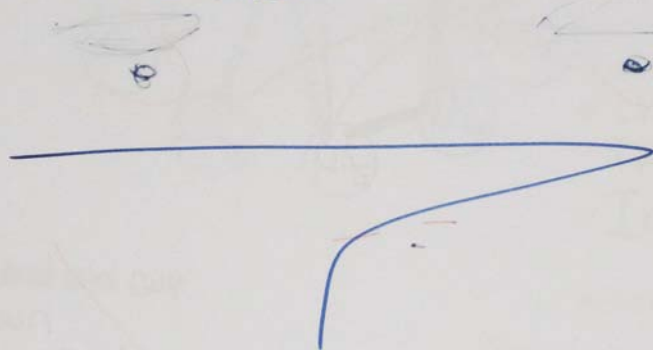


Conversation with talented boy
religious topic NS_F

Appearance of the nun NS_G

Young Catherine looks out through the window NS_B

Old Catherine insists of getting out despite NS_I
the snow.



- Thematic
- Spatial
- Iconic

• visual

(seen/unseen
dualité
Russian/European).
vide/plein

- (WG) weird old guy
- (N) Nun
- (YC) young Catherine
- (BW) blind women
- (WH) weird young man.

The END ☺ & provisoirement.

seughy! *mmmm!*

GROUP 2 (G2): SC

VIDEO FILE: DAY-4-1-ANALYSIS PRESENTATIONS.M4V

TIME: 02:11:07-02:03:42

G2: (PAGE 1 OF PRESENTATION SHEETS) The film being very long and apparently complicated for us to analyze in this short time, we took the same 30mins section that you (R) used in your analysis because it's the densest section. We looked at the 9 NE in the film and all the elements that compose them, such as characters, events, places, stories, etc. and it turned out there's some sort of confusion sometimes, not knowing what links them, for example, is it the characters? The events? The story? The places? Etc.

So the structure made up of Time, Narrative and Space altogether is what makes up the film, the sequences and the narrative. We looked then in the 30mins section to figure the links that hold together all the entities, and thought that there should be one that joins all of them. So here for example we have a general entity that holds something together, and the narrative, time and space that goes through it.

(Page 2) Here we were thinking about what common thing could be joining, linking all 9 entities.

(Page 3) The link can also even be a sort of comparison between characters and their lives. Here we were still thinking generally that none of the stories have a clear ending, and they the imagination of the spectator to finish them.

(Page 4) Here we started going in the 30mins section and going over the links you (R) specified yourself.

(Page 5) We first found 2 common topics between the entities: the first revolves around Death, and the second around Infidelity and family issues. So at first we noticed it in this section, but later on we also saw in the whole movie. And the links between these entities reflected in the stories, and the way they live, like for example, the story of the policeman and his wife, and the family of Jerry and Lois – the woman who does phone-sex – we see that they are comparable but from an opposite perspective, such as male/female, where the policeman is comparable to Lois, and his wife becomes comparable to Lois' husband Jerry; so what we have is that opposites exist not only different entities but also in the entities themselves, and the subjects are treated differently in each of them.

(Page 6) Here we were still extracting and understanding the segments of the 30mins section. Like here for example (11 and 13 on the sheet) we see that policeman is arguing with Betty about her lies, and he starts having the same feelings his wife has when he lies to her.

(Page 7) Here we noticed that every time the camera zoomed in on the dead body in the river (NE_{Kn}) there was a change in segments.

(Page 8) Here we thought of how each entity has its own space and sort of a radiation (influence) zone and how some intersect with each other. The spaces in question are comparable to the neighbors living next to each other in the same space and have interactions and sometimes affecting each other and sometimes not; for example when the girl found out that the neighbors' son died, she decided to commit suicide, meaning that she was influenced by her neighbors' situation. Sometimes these relations are direct then, but sometimes indirect, like when the woman who hit the kid with the car, wasn't really affected by the accident later in the film; she may have felt guilty, but the event didn't influence the progression of her story.

(Page 9) Going more in detail now, the 9 narrative stories are not linear, but they have a specific timing that holds them together, and so different stories take place. However there are 2 narratives that encompass all of them, and greater than their individual stories; we call these 2 narratives "Tragedies". The first "tragedy" is the passing over of the insecticide spraying

helicopters in the opening of the film, and this is the introduction to all the 9 different stories we have in the film, and as they continue forward in the movie we reach the second “tragedy” which is the earthquake at the end. This means that there are 2 different poles between which different events occur.

(Page 10) We found that there was a treatment of social problems in the 9 NE then, and we summarized those problems in 2 subjects: Death and Infidelity. And the NE in which these subjects are treated with are all mixed together. We also charted what kind of relations the NE from each group have with each other, specifying if they already knew other before the film, or met in the course of the film. For example, Stuart and Clair are in direct relation with the doctor and his painter wife, from the Infidelity group, because they are friends; another example is the doctor who gets to know the injured son of the Finnigans, so they are also in a specific type of direct relation, because they didn’t know each before the film. Other examples are Jerry and Lois who are friends with the make-up artist and his wife, and cop’s wife being the sister of the painter, the doctor’s wife. Jerry and Lois (NE_B) for example, belong to both groups because at the end of the film he kills someone. Other than people being related to each other, there’s also a spatial between them when they appear in the same locations at the same time.

(Page 11) So we have 2 larger “problems” A, Death/Suicide, and B, Infidelity, but we also noticed there was a third one that was taking a lot of screen time in the beginning, and it was C, “Casey in the hospital” (NE_F). We discovered that the rhythm alternating between the segments treating these 3 subjects becomes faster with time, with C appearing more and more often. We expressed this in a diagram that resembles a cardiograph, having the appearance of a dying person’s heartbeats since the appearance of the C segments were sort of constant first, then appearing faster, more often and for longer periods, until it more or less disappears. The blue represents A, green B, and the red C.

(Page 12) In this page we imagined that the characters were living in the same neighborhood kind of place, and have similar social problems that sometimes link them together like a social network. Also we pointed out the progression of each narrative: some start alone, but end up linked to another NE; some have clear endings, while some have obscure endings (open narratives).

(Page 13) And finally, were trying to chart the common spaces the NE share and intersect in.

End of Presentation

Globallement:

A → Structure of the movie: - 9. (NE)

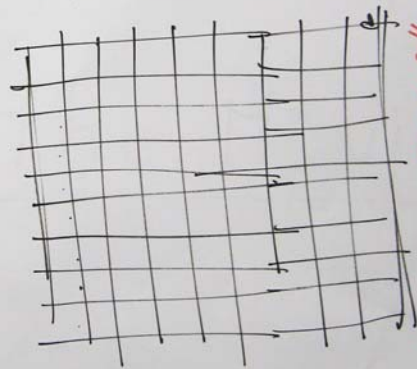
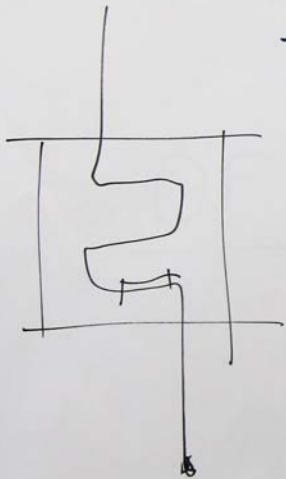
Every N.E. . Persons
 . Events
 . Story
 . Places (Spatial ...)

B → Relations Between different

Entities → Extra Connections.

→ Intra "

$t=0$
 $t=t$



The movie is recording a path through 9 entities.

. its chaos.

- 1 -

- C - What ~~are~~ is (are)

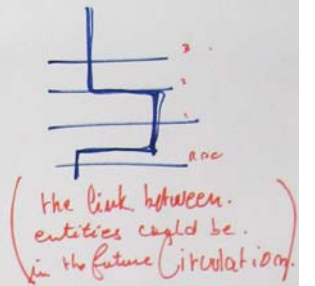
The link(s) Between.

The 9 Entities.



it Could be. The Message

- . The Problem
- . The Purpose

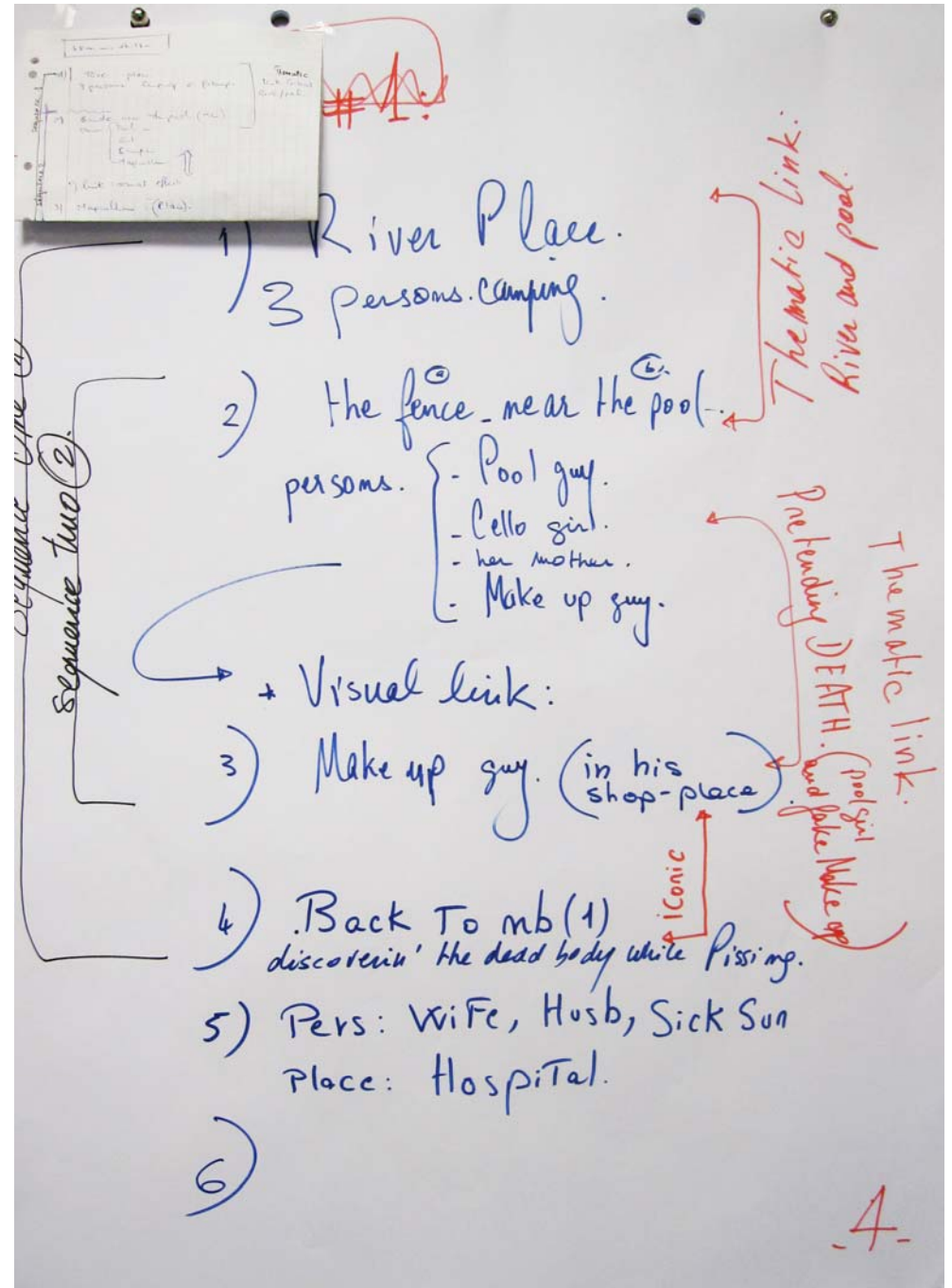
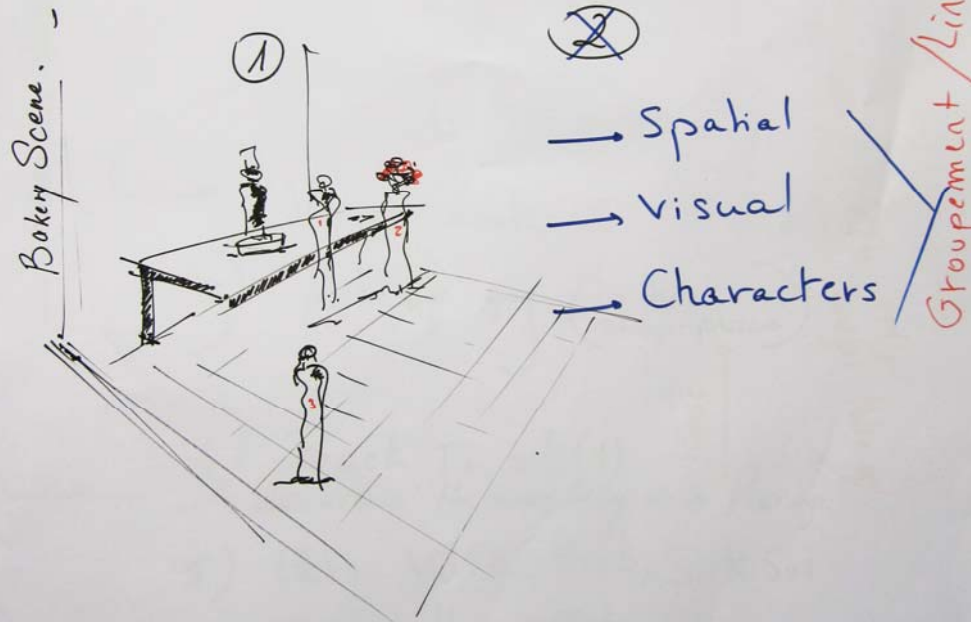


(the link between entities could be in the future (iteration).)

OF The Movie.

- 2 -

The imagination of the Spectator is not limited, No story is finished with a predictable ending.
Some characters can refer to each other without connecting.



6) Pers: Police's Wife
Place: Kitchen. (Home)

7) Pers: Painter
Place: Atelier (Home)

Iconic link
(Food... Butter Bread)
Thematic (Phone)

1 8 2 are
ated in
ospital
Non
me \Rightarrow NARRATIVE

$\frac{1}{1/52}$

Social
Problem

8) Back To nb (6).

Person: Police family
Place: Home.

Thematic (Family & Social
lives)
Iconic (Phone)

Contradictions.

9) Person: Lois & Jerry family.
Place: Home.

NB: Contradictions is Between:

• Characters: Police man = Lois
Police's wife = Jerry

• Same Social Problem Seen in 2
Different point of view.

- 5 -

10) Person: Painter
Place: Home (Atelier)

Iconic
(Smile)

NB: Family Problem(s).

Link Between \neq Entities.

11) 3 Entities.

• Police officer

• Betty & her Son

• Waitress.

One place

12) Person: Bakery man & Howard
Place: Bakery / home

\Rightarrow Same segment going in 2 pl

13) Betty arguing with the officer

\Rightarrow Same \rightarrow Feelings
 \rightarrow Situations

(Repetition)

- 6 -

14) \notin

Places: Pub.

Persons: Singer

Waitress's Husband.

15) Back To hospital.

16) Back to the pub

17) Back to the River

18) Person: Honey & Bill

Place: Neighbor's home (Aquarium)

19) The River (Fishing)

N.B: Transition's repetition(s)
Between The ~~2~~ Segments.

(Death Body in The River/WATER)



7.

Audio Link

Iconic Connection
(Fluidity in water)

Thematic Connection



20) - Person: Violinist / her mother

Places: Home

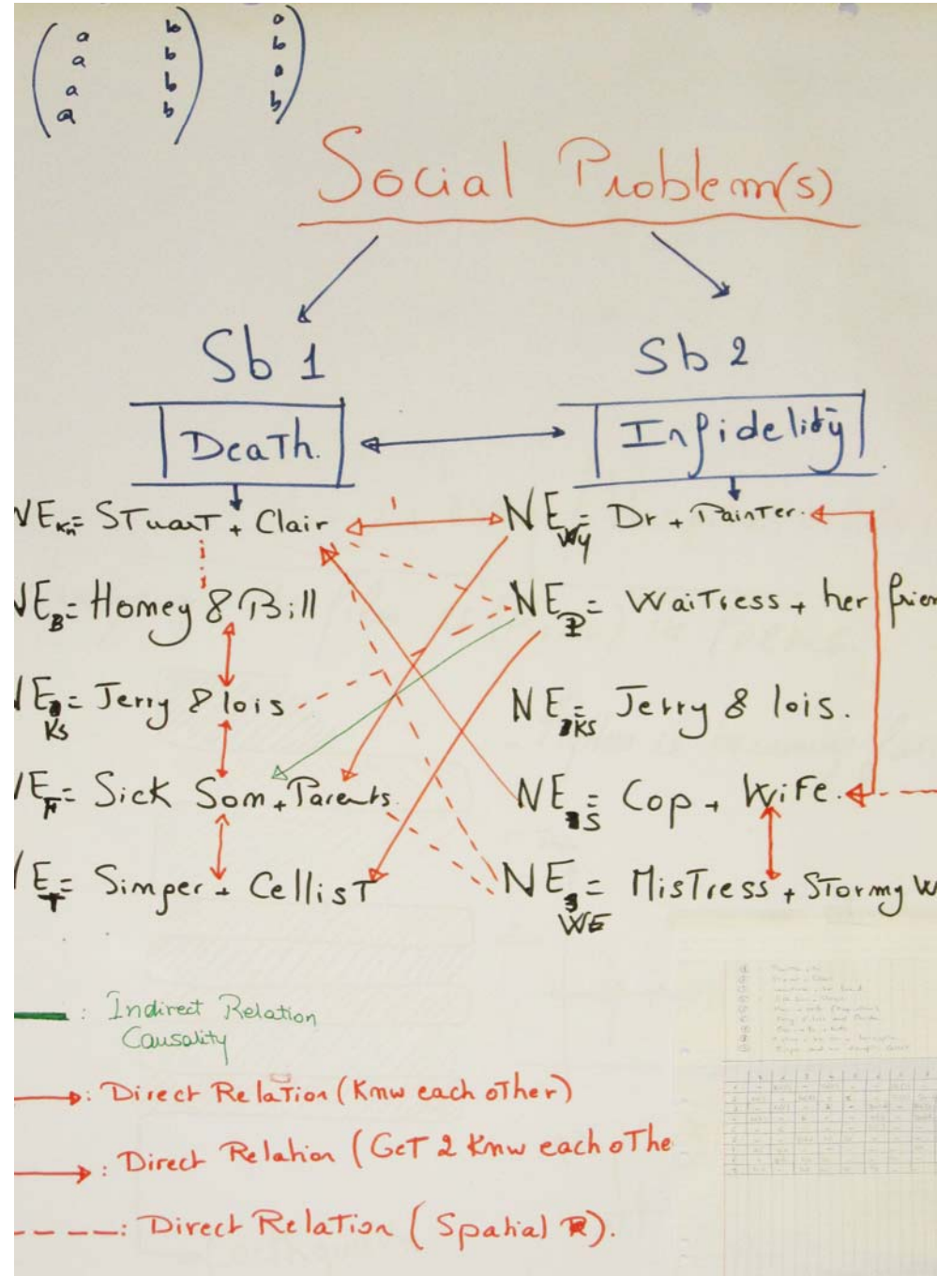
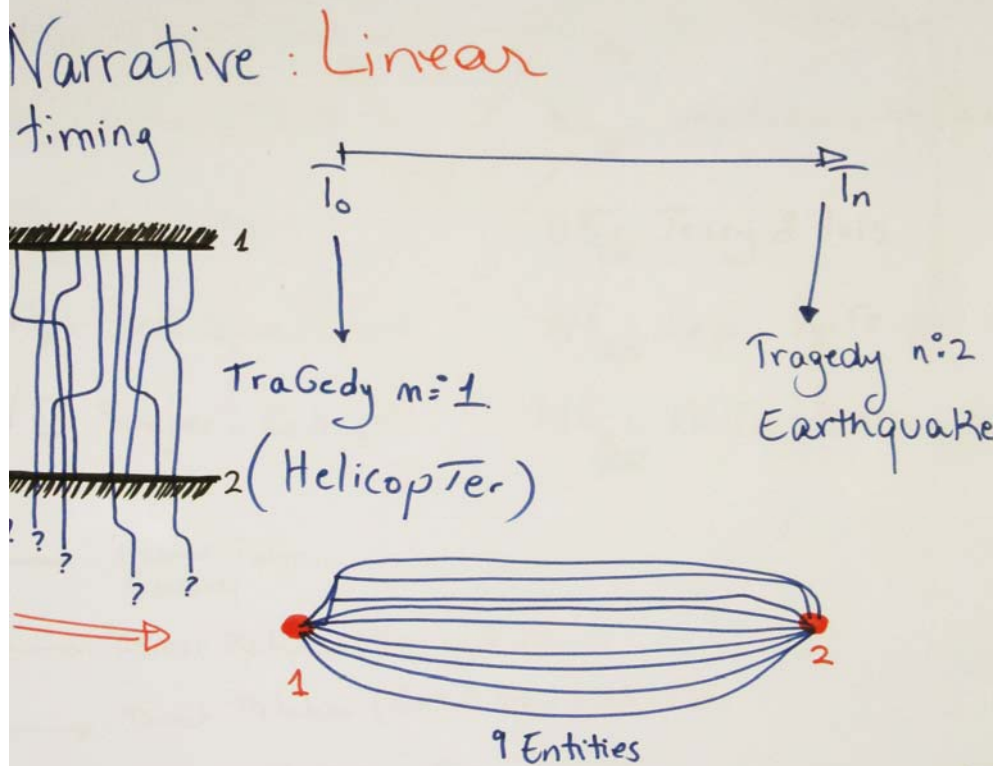
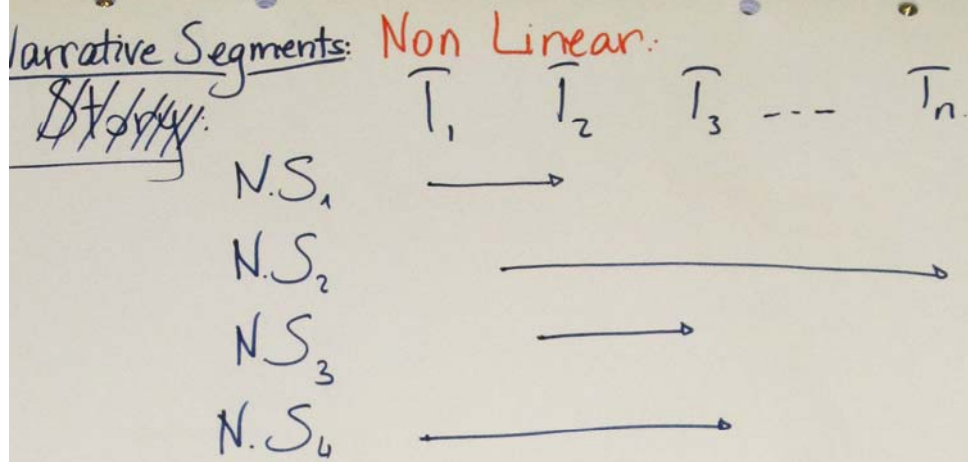
21) - Person: Stormy weather

Places: Home.

22) - Places: Hospital.

Synthese:

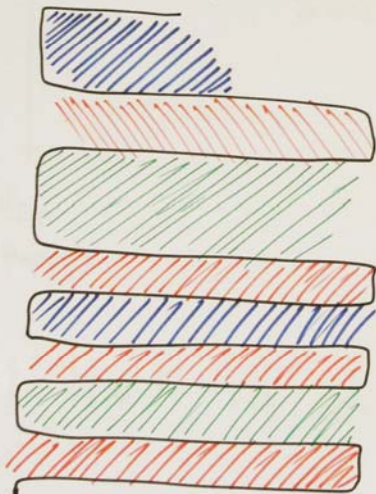




Soit: $A: \text{prob} \rightarrow \text{Suicide}$
 $B: \text{prob} \rightarrow \text{Death.}$

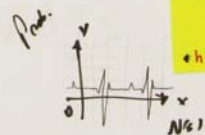
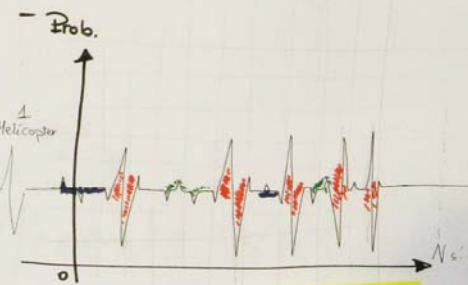
$C: \text{Cassey / Hospital.}$

Analysing the film as "Rims" in Poems.



→ Earthquake

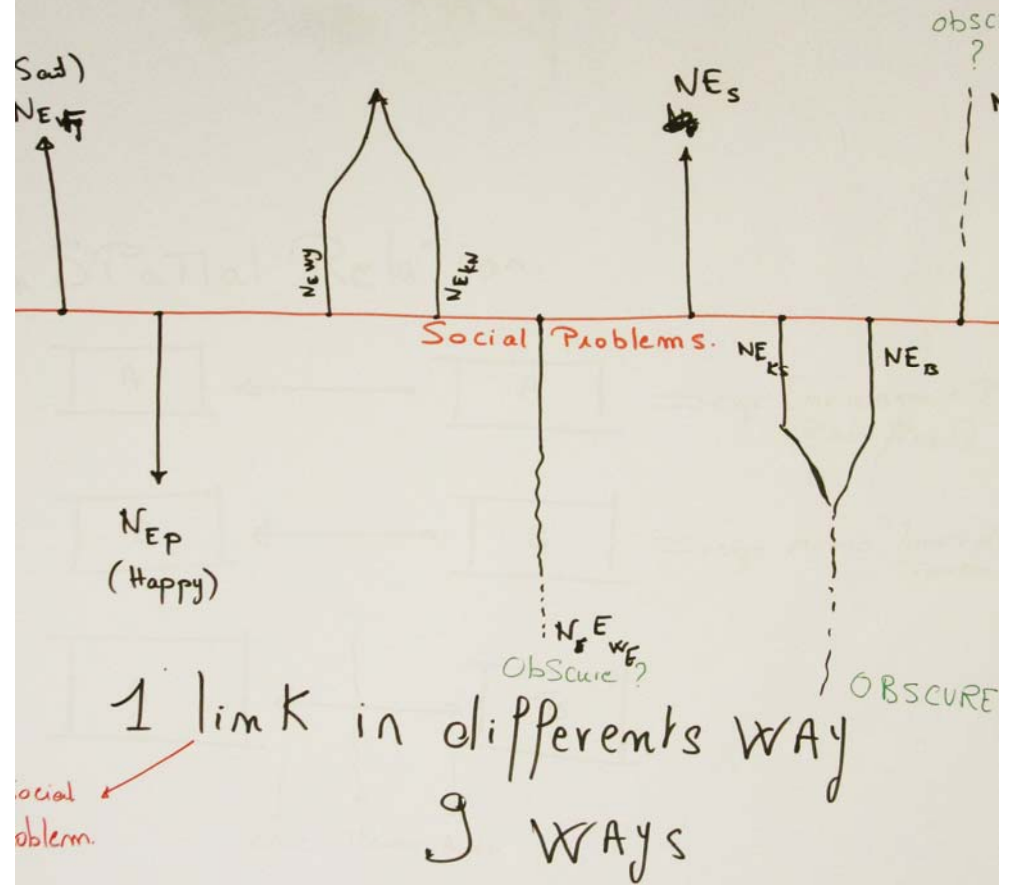
- Rhythm is becoming fast

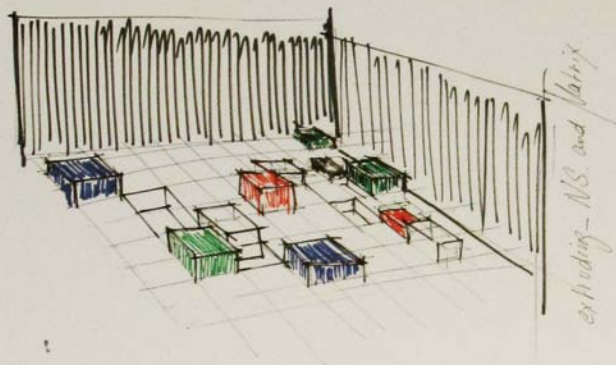


heart beat diagram

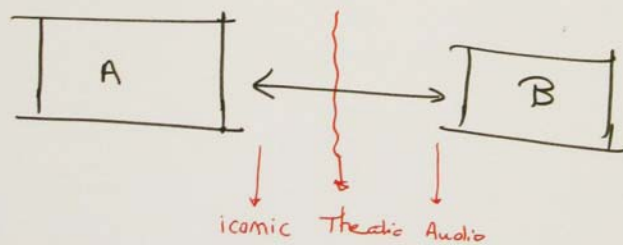
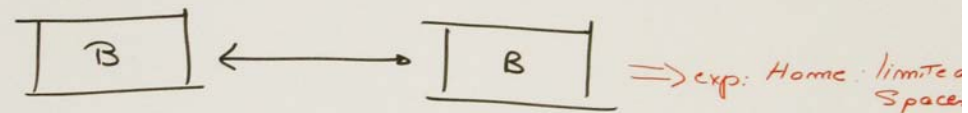
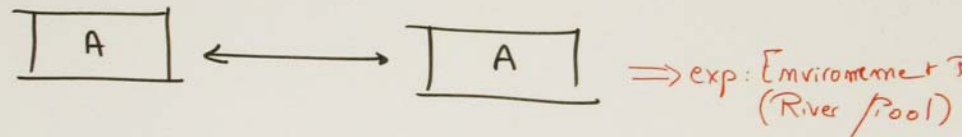
- 11 -

Social Networking Site





Spatial Relation.



TRANSCRIPTIONS OF THE DESIGN PHASE PRESENTATIONS (18-03-2011)

PARTICIPANT 1: RA – SHOPPING MALL

VIDEO FILE: DAY-5-4-DESIGN PRESENTATIONS.M4V

TIME: 00:15:11-00:24:18

P1: So we are 4 people in our group and we had already given a presentation about the analytical part, and we had reached the following conclusions: the Narrative is subdivided in the Fabula and the Syuzhet or Plot; and we have Diegesis and Segments. We made an analogy between architecture and film, and we found that Narrative provides us with Function, and Fabula becomes the Program and the Syuzhet becomes the Diagram. How do we explain all this? We do it through Codes that are Signs. Diegesis gives us Form, it's understood as Form; and the Segments are the Spaces.

Now, RA has a fragmented Narrative meaning that the Functions are fragmented, but with a continuous Diegesis, meaning that the Form is continuous. So I started from the conclusions of this presentation.

Continuous Diegesis means that the Form has to be independent, stable, static and rigid, and reflected in an external hull. But we have a fragmented Narrative, meaning that the spaces and sub-spaces will be fragmented; but this fragmentation cannot materialize by itself, so there's another element that will make this fragmentation happen. So fragmented by what?

I considered that in the film there are active Existent elements, and passive Existent elements. The passive Existent elements are, for example, the paintings, the (architectonic) structures, or the (theater) play. And so, by following the camera's movement and scenes, the characters stop at some paintings, which take them to different dimensions, and push them to have conversations and then send them to other spaces to continue their way. So, passive Existent elements are the ones that induce the spatial changes. So I found that on our site – where the only pre-existing element is the sea, on the outside – this element will enter my space which is stable and static, and will fragment this space into subspaces. So the water goes in. And I therefore have fragmented subspaces. This fracture in all this staticity, with the only external scene in the film – when Catherine goes out in the garden, it's the only external scene, and so we can consider this a fracture – will create this fragmented space. Now the whole film has certain homogeneity, even with the existing fragmentation, fracture and stability, there's still some sort of homogeneity; and I considered this homogeneity as being a perpetual, continuous cycle that will continue because it's dynamic and continuous and in perpetual cycle. And at the same time we have the opposing entities that are the staticity and the fragmentation. The means I found to reach to this continuity and cycle is to link this element that created this fracture to the static and stable element. This link is done by the water that enters to form the external hull, then it (the water) solidifies progressively and shapes the external hull that is static and stable. That's it!

R: You still have 5 minutes to spare.

S: This is the commercial center?

P1: More or less yes, it's not finished in terms of form yet. I drew this to express the significance of the water that will shape the external hull.

R: How are the functions expressed in your project?

P1: The functions are distributed on the different levels. There's nothing much to do with them, it's just a shopping mall.

S: How does the water go up and solidify? How is it structurally?

P1: It's actually just visual. It's just a glass structure that will go up and exit to/on the external walls.

R: I understand that this structure has become a certain central hall that joins together all the functions.

P1: It's become a visual central hall. For example here, I inserted a footbridge...

Z: I can see that the passage from film to architecture is much more developed here.

R: Yes here we can see the logic better. So Diegesis is the fragmentation, and this fragmentation is represented only in these 2 blocks that have been separated? Is that what you meant by fragmentation? Or is there still something more to it?

P1: It could also be represented by the difference in levels; they are breaks that will... the main element that is a parallelepiped with different levels of slabs. Now how to push further this idea of fracture, I don't know yet. Maybe by different levels, and retreats...

R: Concerning the passive and interactive Existents, how did you express them in your building?

P1: The passive Existent is what already exists on the site itself, because here what I explained about the Existents in the film, are what already existed in the Diegesis, so here it's the water element, or the sea already existing on the site. So this is the passive element. I forgot to mention that the passive Existent elements, which are the paintings start becoming functional when we stand in front of them in the film and so we have some sort of interaction between the characters themselves, discussing about the themes they encompass, and so they (the paintings) become functional only at this specific moment.

R: Ok, then what happens here (in the building)?

P1: What happened here is that the sea becomes functional when it's in movement; and when it's in movement, it creates this fracture represented here, therefore becoming functional.

R: How about the interactive Existents, the characters, did you use them?

P1: I didn't use the interactive Existents. These were the only opposites I used.

R: (addressing to S and E, Z having left) Just to clarify the meaning of Existents: they are all that exist in the narrative of the film, such as the characters, locations, objects, everything that we see in the film world. There are 2 elements at play in the Narrative, Existents and Events: Events are the causalities and actions that link the Existents together; and the Existents generate Events, but at the same time being connected by them.

P1: There are 2 types of Existents: the passive and the interactive. For example the people in the film are interactive because they interact, either by dialogues or movements, and there are the passive ones that can be understood as being elements such as the paintings, where in other films for example, they would act only as decorations, in this film in particular they acquired an interactive functionality that takes us from space to another by means of the dialogues/conversations they generate.

S: I'm wondering if departing from an architecture, could we reverse this process?

End of Presentation

Shopping Mall —

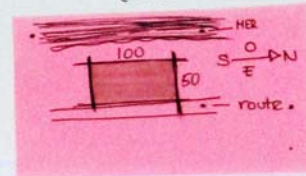
NARRATIVE FUNCTION
 FABULA PROGRAMME
 SYZHET/PLOT ORGANISATION
 CODES SIGNS.

DIEGESIS FORM

SEGMENTS SPACE
 Fragmented narrative but continuous diegesis
 → RUSSIAN ARK.

RUSSIAN ARK → smallest unit of the filmic chain
 → we have to find smaller units to delimit syntagms.
 Audio-visual signifiers (Im-signs): characters space limits...

⇒ Audio-visual signifiers can be compared to furniture, objects, in architecture
 "Im-signs" → "Space signs"
 ⇒ Subspaces delimited by furnitures, etc... (SYNTAGMAS).



CONTINUOUS DIEGESIS -

- Forme, indépendante
- stable
- statique/rigide



FRAGMENTED NARRATIVE -

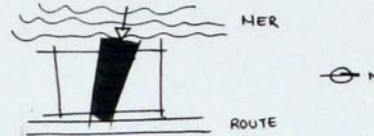
- Fragmented spaces -
- by what ???

Elements extérieurs
 → MER.

→ mer = éléments extérieurs des personnages qui alimentent.
 → Peintures/tableaux/théâtre sculptures, qui ont les sujets de conversation, tout au long du film.
 → Alimentation de la fabula et SYZHET (programme).
 EXISTANTS PASSIFS.

Et définissent les sous-espaces -

⇒ Cassure dans cette staticité.



→ Cassure crée la seule "scène" extérieure de tout le film → Catherine.

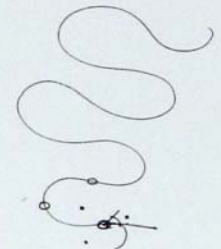
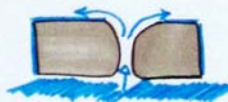
Cassure qui va donc créer cet espace fragmenté.

Homogénéité dans le tout.

⇒ allier ces 2 entités opposées -
 STATICITÉ / FRAGMENTATION
 ⇒ dualité

• Forme statique / indépendante/stable.
 • Espace fragmenté (Fragmented narrative)
 • Homogénéité dans le tout
 → CYCLE PERPETUEL GÉNÉRATEUR.

HOMOGENEITE → CYCLE PERPETUEL GÉNÉRATEUR.

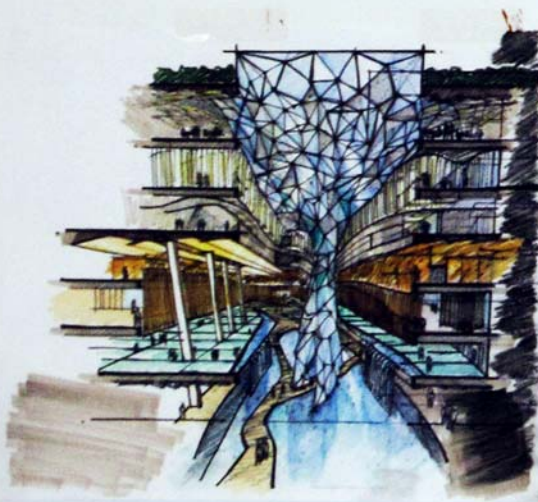


~~EXISTANTS INTERACTIFS:~~
 CARACTÈRES / PERSONNAGES

EXISTANTS PASSIFS:
 TABLEAUX / SCULPTURES

MER: élément EXISTANT PASSIF qui intéresse quand elle est en mouvement.

TABLEAUX/SCULPTURES: EXISTANTS PASSIFS prennent fonction quand on accède à son "espace".



Mariella Tannouri
 Russian ARK
 Shopping Mall —

PARTICIPANT 2: RA – CULTURAL CENTER

VIDEO FILE: DAY-5-4-DESIGN PRESENTATIONS.M4V

TIME: 00:03:15-00:14:40

P2: First of all in RA we have the Narrative, or narrative fragments, where the narrative is not continuous – for example the film shows a certain epoch and then suddenly jumps to another one, and they're not chronologically successive (the epochs), like when it shows us Catherine the Great, then jumps to the epoch of Peter the Great, then Nicolas I, then Nicolas II, so it doesn't show these in chronological succession – and we also have the Diegesis, which is all audio-visual elements in film; and the diegesis is continuous (in RA) because it's (RA) one autonomous shot, a single continuous shot, that's why we adopted that since the narrative is fragmented, it is somewhat dynamic. That's why I used organic architecture related to the narrative, because narrative also represents function: diegesis is the form, and the narrative of the film is the function in architecture.

So I took organic architecture as reference because it's the opposite of everything rigid and static, so I was inspired of aquatic plants. Why aquatic plants? Because the site is by the sea, so I used the algae and corals for inspiration for the functions; as for the diegesis, it is the form, everything that is autonomous shot, which means a Cartesian architecture, and that's I used the cube.

So from these 2, I reached a personal conclusion – since the narrative that is the function and is organic, and the diegesis that is the form, a Cartesian cube – that we have something I call “architectural lobotomy”. First of all, “lobotomy” is a neurosurgical procedure, a form of psychosurgery that they perform on someone who has a lot of psychic problems, and a lot of dynamism on the inside and feelings; so they perform a lobotomy on him, so although he could be suffering from the inside, but he can't express his feelings appropriately on the outside anymore. He could appear very neutral from the outside, although being very dynamic on the inside. That's why I related it to a disease called lobotomy, and called it “lobotomy architecture”.

So that's why I started from a Cartesian form which is a cube, and inside the cube I opened up pipe-like structures that look like algae, and since they are interior, they represent the functions on the inside, the organic elements. Then I subdivided them in order to make use of the spaces that are not only the structure, but also the spaces on the inside can be useful by inserting vegetation and circulations – putting stairs and elevators in them. And it (the cube) is also divided into floors. Even the spaces between these floors are not the same, meaning they are not linear. And here in the floor plans, it's true that from the outside the plan is a square, but on the inside, the same plan can change because it is separated by separating walls – interior mobile separation panels – for example as we can see here, the space can be a parking space, a library, offices, or conference rooms. And here we can see the façade that is neutral.

R: You honestly lost at many points! You started with the film – narrative, function, diegesis – then you went on making an analogy with algae, then continued with lobotomy, to end up just describing your architecture. I honestly didn't see any connections yet; could you please explain again everything in a more concise and comprehensible way? I think there are too many ideas that don't correspond to the objectives sought in this workshop. I think I was clear from the start that the whole purpose of the workshop was to start off with a film, use that film and ONLY that film and translated it as directly as possible into architecture making use of the analytical processes I introduced in my lectures. Here you used “organic” elements – I would've understood if it were just concepts of “organic” architecture – but what you did, is use the analogy of algae, that has nothing to do with the film; and I still don't understand about your concept of “lobotomy” in this work! Plus, the building that you designed, and put on paper is actually an exact copy of Toyo Ito's “Sendai Mediatheque” – an internationally recognized building, which I also happened to visit it a little more than a year ago!

P2: Ok, I'll explain again the connection between the narrative, diegesis and lobotomy. So the narrative in film expresses function in architecture...

R: Ok, where's that in your building?

P2: The functions (functional organization) are not stable, not fixed.

R: Ok then, why aren't they stable then?

P2: Because there are a lot of jumps, like jumping from Peter the Great to Nicolas I; there are a lot of jumps from one epoch to another, which means that there isn't a clear chronological order. That's why I expressed some sort of dynamism on the inside; there isn't any chronology or logic, that's why I used the "organic".

R: But why use this idea of "organic", since this "dynamism" and "instability" that you talk about in your building already exist in the film? So the narrative in the film already provided you with what you already accomplished in the end, so why add to it another analogy?

P2: Because I felt that it was related to the "dynamism" concept...

R: But does it offer anything additional to the properties of the narrative then?

P2: It offers a sort of image that expresses what I was talking about.

R: But that image is already the film; it offers an image, a structure, and the things you were talking about already exist in the film itself! So what's the need to jump to the "algae"?

S: We actually felt that the "algae" and "lobotomy" ideas were quite marginal; you could have not mentioned them, and nothing would've changed in your design.

R: Yes, you could have reached to your design straight from the top (the film analysis section) without going through "algae" and "lobotomy". Anyway, moving on to another subject, the site is a rectangle of 50x100m situated by the sea, why is your volume a cube then?

P2: I felt that the cube has a stable image, where all its sides are equal and stable.

R: What made you look for "stability" in the film? Because we all had concluded that RA is a dynamic film that doesn't contain any cuts or edits, with a continuous and constant movement; so why a static, heavy cube divided into floors with strong physical/spatial separation between them?

P2: I considered the diegesis, since it's an autonomous shot, it has a lot of autonomy; it's a single shot. It's the opposite of the narrative.

R: RA itself is made of a single shot, meaning there aren't any other shots in it, and the diegesis also is continuous; but here, you did exactly the opposite, you subdivided more and more. The narrative in RA is made of jumps. Based on what you explained, I can manage to see this in a way in the interior organization with the changing spaces, but other than that I don't see any other connections.

P2: As I said before, lobotomy is a state of mind of a person, and as we can see here, the narrative is fragmented, organic with a lot of noise; so I considered it as if it were a person suffering from mental problems, and then after being lobotomized, that person remains calm and neutral from the outside. So that's how it's related. Always autonomous.

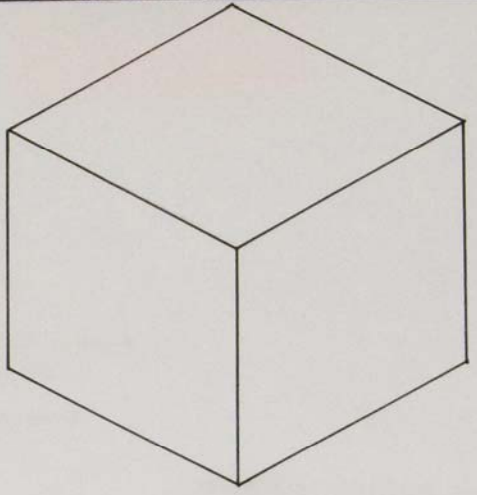
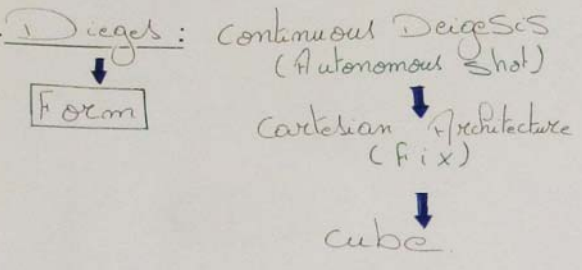
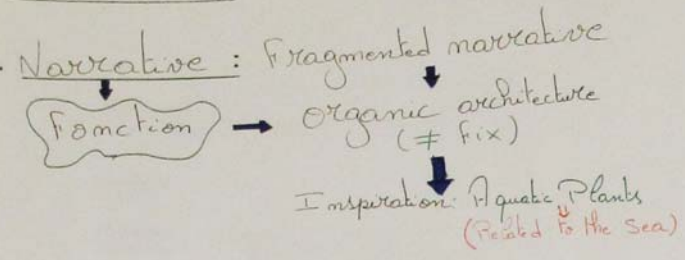
R: Ok, I appreciate this, but the purpose of the workshop was to use the film directly and design architecture from it, without adding any external factors to the process: architecture and film. I'm not saying what you did is wrong, but it doesn't respond to the workshop itself. What you

did could be valuable for me to analyze and see if the results of my film analysis and/or those of your group's analysis were enough by themselves or not to allow you to design architecture. But you should've also given a valid justification for that; in your opinion, were they not sufficient enough for architectural design?

P 2: I imagine that these (film analysis results) could've been enough by themselves without the "lobotomy" part, but I thought I would add even more meaning and justification to it all, because I thought that maybe these (film analysis results) were too little for the presentation.

End of Presentation

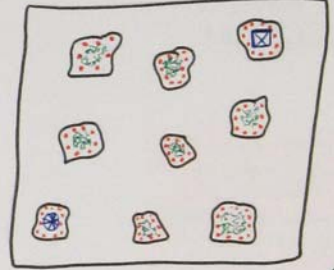
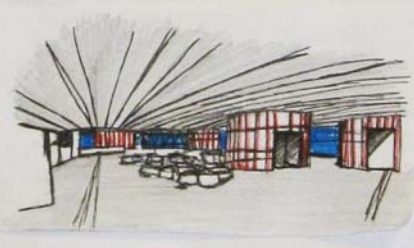
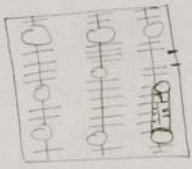
Russian Ark:



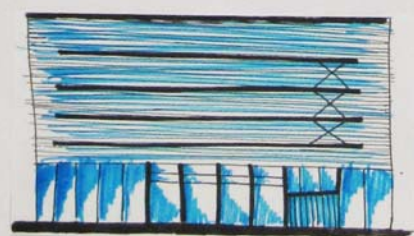
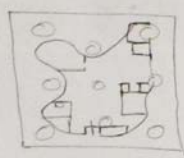
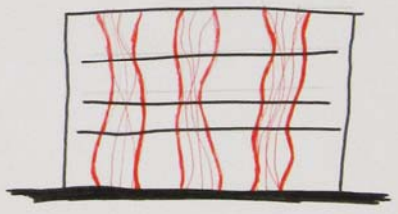
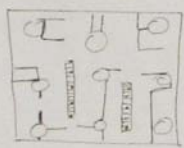
Fragmented narrative but continuous
 Diegesis → continuous fix forme and fragmented organic functions unfix.
 Functions inside the form

Lobotomy Architecture

Lobotomy: a neurosurgical procedure, a form of Psychosurgery in which the nerve pathway in a lobe or lobes of the brain are severed from those in other areas. (ie. Stimulant effects do not reach a lobe or lobes, le. lobe exclusive, lobe fixe et neutre)



- Vegetation
 - circulation
 - Potence cylind



- Elie Tamm
 - Russian Ark
 - Multipurpose cultural center

PARTICIPANT 3: RA – RESIDENTIAL COMPLEX

VIDEO FILE: DAY-5-4-DESIGN PRESENTATIONS.M4V

TIME: 00:25:57-00:34:10

P3: (PAGE 1 OF PRESENTATION SHEETS) Just a reminder of the film in order for you to understand what I'm talking about; RA is a single shot film, meaning there are no cuts, and walking in a museum, and each space creates a new epoch, for example starts with the 18th century, I guess, and goes on to another, which means that we don't progress linearly. So comparing it to Christian Metz's structure, just as my colleagues already mentioned, because we all started from the same concept: his Narrative is fragmented, but the Diegesis is continuous. But at the same time it's a single segment divided into multiple narrative syntagmas; and what do we rely on to understand how the syntagmas are divided? We do it on something Pier Paolo Pasolini calls "im-signs", meaning any sign the image captures, like the characters, visual limits, anything in the image. In order for me to know how to segment my architecture, I tried to find out what the "im-signs" are in architecture, what the smallest unit is – just as the "im-signs" are the minimal units that we find in film – so what is the smallest unit in architecture?

I went back to the De Stijl where they say that "the abstraction is a return to the primary", the primary which is the abstract, meaning that in painting the primary is the straight line, and in space and 3D, the primary is the plane; it means that I will rely on the plane in Space.

Here I tried to do some sketches, very conceptual, nothing much.

So if I have a general (architectural) plan, even before thinking about my own plan, I'll have one segment, one space and on the inside, the subspaces defined by planes, im-signs – just as all the De Stijl, Mies Van Der Rohe would do. If I have a section, again, I'll have one segment and subspaces, and both of them are creating this.

(PAGE 2) One more thing about RA, when he's (the Camera-Figure/Sokurov) walking in the museum, he starts off from beneath the ground, under the theater, he says "I open my eyes I see nothing", and at the very end he discovers the museum is an Ark, a ship in the sea, and says "Look the sea is all around us we are destined to sail forever, to live forever". So I tried to locate my project in the site as a cube surrounded by a water surface, and the circulation starts from the interior where it's dark, until it goes out – it moves from darkness to light – and since we don't progress chronologically, my circulation won't be very smoothly linear either – with lots of ups and downs. There are also non-narrative syntagmas in the film that I use as spaces without any clear functions. So this is what I'm trying to generally do. By the way my topic is a residential complex.

R: So these became your apartments? The platforms?

P3: Yes, I have about 15 apartments. I considered the circulation as a camera, a camera in a circulation set-up, going up and passing through everything.

S: The apartments are inside the cubic volume, with well-defined volumes?

P3: No not necessarily, they are more of intersecting planes, but if I had more time I would've developed more how each apartment could've been subdivided.

R: Everything was going very well until you started talking about non-narrative syntagmas and the way you interpreted/converted them here. Just let me explain quickly (to **E** and **S**) what narrative syntagmas are: narrative syntagma is the smallest unit in film that has meaning, that creates meaning. In RA, since there are no shots – usually a shot is the start of a camera shooting until its end, and this is the minima unit in film, the smallest narrative syntagma – so since here there are none, in my analysis of RA – the results of which they are using – I considered that each character that clearly refers to a historical epoch he belongs to – because there are many

characters that belong to many historical periods and appear in different parts of the film in a non-chronological way – so each character, each sound or image that we see that sends us to a clear historical period, in addition to the camera movements, provide us with narrative syntagmas – the minimal units – and everything that does fulfill these conditions is considered as non-narrative syntagmas.

As for my critique to what you (**P3**) just said, the non-narrative syntagmas in the film (RA) have a function of connecting, filling in time, and they are connecting because they exist between 2 narrative syntagmas; and the camera and the viewers are moving through them, and not avoiding them. What happened here (in **P5**'s project) – as I understand, and correct me if I'm wrong – is that for you, the non-narrative syntagmas are things occurring on the side – like the gardens...

P3: Just as I drew them here where the circulation doesn't go through them? Yes you're right I just realized this now.

R: So if we follow this logic, then maybe the red in your project (the circulation path) should've been the main element/part of the non-narrative syntagma, and then the punctuations should've been the narrative syntagmas.

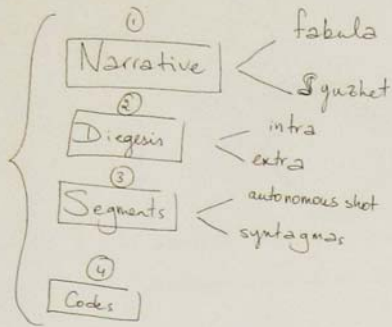
P3: You're right, that's true. I just noticed this now.

R: It's ok, no problem.

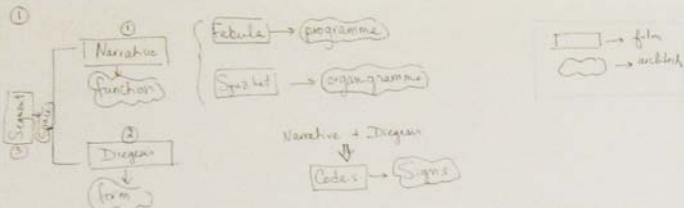
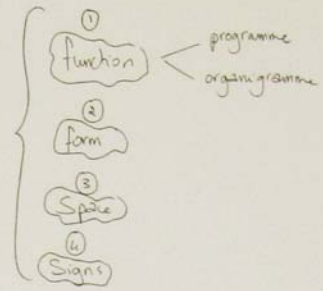
End of Presentation

Christian Metz

Narrative Film



Architecture



- Russian Ark: 1 continuous shot \Rightarrow 1 large segment \Rightarrow 1 large space.
- 1 segment divided into smaller narrative syntagmas \Rightarrow 1 large space, divided into subspaces.
 - continuous diegesis, fragmented narrative \Rightarrow 1 continuous, regular form, but fragmented functions.
 - Narrative syntagmas delimited by "im-signs" \Rightarrow subspaces.
 - delimited by "spc-signs".

What are "spc-signs"?



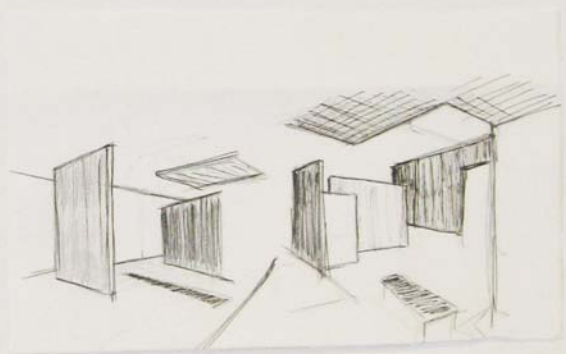
Russian Ark

Residential Complex

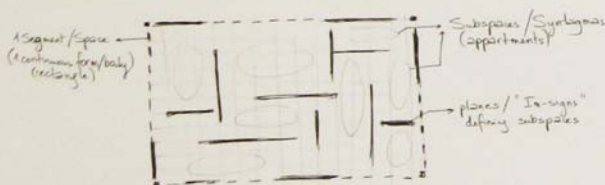
- | | | |
|---|---------------|----------------------------------|
| Fragmented narrative | \rightarrow | fragmented functions |
| Continuous diegesis | \rightarrow | continuous form/body |
| 1 Segment | \rightarrow | 1 Space |
| 15 narrative syntagmas | \rightarrow | 15 Subspaces / Apartments |
| "Im-signs" defining narrative syntagmas | \rightarrow | "Planes" defining "subspaces" |
| Narrative / Scenes delimiting the narrative syntagmas | \rightarrow | Circulation delimiting subspaces |

De Stijl: pure abstraction & a return to the primary

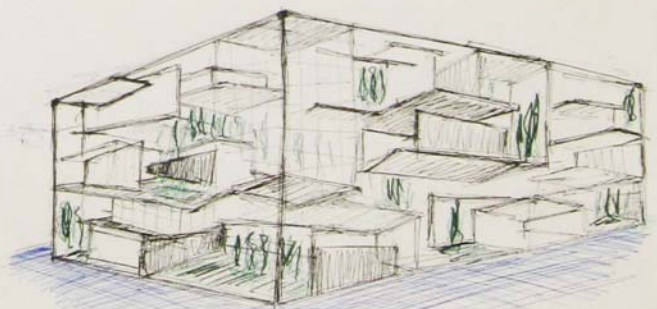
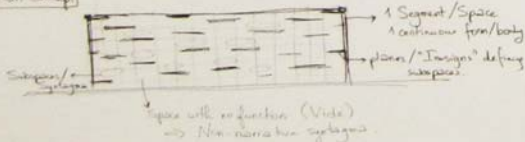
- In painting / 2D: the primary is the straight line
In space / 3D: the primary is the plane



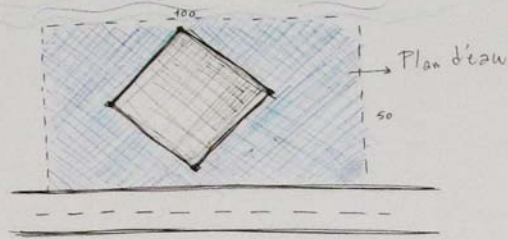
Plan Concept



Section Concept

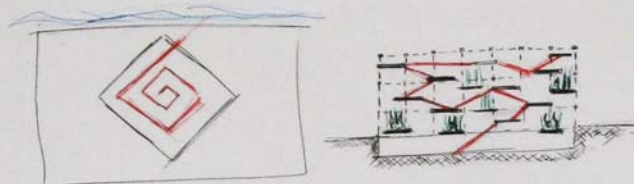


16iba Lawk
Russian Ark
Residential Complex



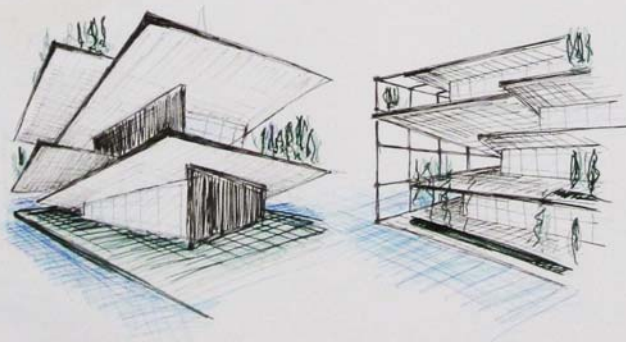
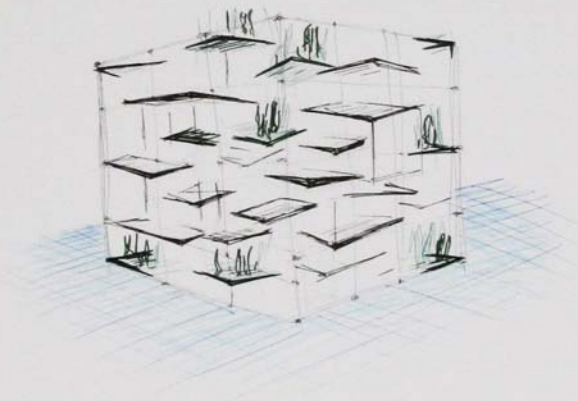
Emplacement

From
 "I open my
 eyes... and
 I see
 nothing"



Circulation

to
 "Look... the sea is all around.
 We are destined to sail forever...
 to live forever!"



Kiba Gunk
 Russian Ark
 Residential Complex ②

PARTICIPANT 4: RA – FERRY TERMINAL

VIDEO FILE: DAY-5-4-DESIGN PRESENTATIONS.M4V

TIME: 00:35:17-00:47:30

P4: (PAGE 1 OF PRESENTATION SHEETS) So we were doing an analogy between film and architecture; we considered the film having narrative and diegesis that narrative is function and diegesis is form – by the way diegesis is everything that you see on-screen, everything we are seeing, all the audio-visual things are part of the diegesis. For us, what ties the diegesis to the narrative is the segment, and what ties function to form is space. So segment is equal to space, and space is a common ground between cinema and architecture, because we have space in both.

In the case of RA, as said before, we have a fragmented narrative and a continuous diegesis, implying that I have a fragmented function and a continuous form. RA is already the smallest unit meaning that I have an autonomous space, and an autonomous or purely linear form – the form doesn't have to be a single volume, but we have read a certain linearity in it. Continuous diegesis is a continuous form.

How to define syntagmas? We used Pier Paolo Pasolini's im-signs – as mentioned by my colleague – and in order for us to define spaces, those im-signs became space-signs, so in architecture the film characters, space limits and lighting can become the furniture that defines a space, lighting also from one space to another, direct lighting, for example, can also define spaces. As for segments, which are made of syntagmas, I considered that the functional spaces are the narrative segments, and the circulation – which I considered as negative functions – the non-narrative segments.

Moving on from RA to the my topic, Ferry Terminal, the linear diegesis becomes a linear form, divided narrative becomes divided functions, narrative syntagmas become sub-spaces, im-signs become spa-signs, no communication between segments gives no communication between spaces – because we have (in RA) each segment acting almost independently of the others, without communication between, because each space (in RA) defines by itself a syntagma – so I considered that each space defines a function without there being any communication between them.

Now, diegesis is everything seen on the screen...

R: Just to note that there is also “off-screen” diegesis, and not only “on-screen” diegesis.

P4: Ok, so I considered that there are 2 who are looking at the screen (watching the film): the spectator and us (the analysts). The spectator sees that RA is continuous, and that its movement was linear. We considered that the diegesis was linear, and that the segments were spaces. So the important point here is that in my architecture there is a point of view of the viewer, who will come to see the architecture, and the analyst. So, I want to show the viewer a linear form and the analyst too has to be able to see this form but to also see its origin.

So the shape that I considered is a random linear one, and the functions are subdivided also randomly. The diegesis is a part of the narrative but at the same time independent of the narrative, meaning that I have spaces that are dependent and independent of the functions at the same. So how conceive these spaces, and the links between them and the functions? So why wouldn't the shape define the spaces and the functions? It means that this shape I conceived provides me with functions at some places, and also with sub-spaces which are also defined by furniture and lighting.

(PAGE 2) From this point on, I consider my shape as rectangular, since the site is a rectangle, and to represent the diegesis. The structure is independent and linear. How can it be independent? By giving the external volume different properties from the internal spaces

without showing the planes inside. I also add in dynamism because the diegesis is dynamic because the film moves on non-stop from one story to another. From diegesis to narrative, dependent and independent, for example, I conceived 3 spaces here but without any complications between them, because they are based on segments. For example I have the administration at the top, an entrance hall (by land), and a hall for arrivals (by sea), and there are no visual connections between them. From shape to function, where each plane is defining spaces and making shaping my architecture. Internally, the functions can have open spaces, but how to distinguish the functions in these open spaces? First of all by means of furniture, for example a desk for the reception area on one side and a waiting area on the other; and also by means of lighting. Light that can separate between two sections, thus defining distinct spaces, which are also the im-signs (the lighting separations) that we considered as spa-signs.

The shape that I have also defines the circulation, for example with this part goes down, I can have stairs and ramps, which are the negative circulations from the segments. And in order to emphasize more the separation, I considered that each part has its own entrance, in order to further cut the communication between them.

So this is what tried to draw, not necessarily this exact from, but something similar, linear, and subdivided.

R: I didn't understand here, what's the spectator and what's the analyst?

P4: In our analysis we saw the linear properties of the diegesis, but the regular spectator can also see this, just like someone coming just to look at my architecture from the outside; so this I considered as a spectator.

R: Ok then what happens with the user of your architecture?

P4: The user wouldn't see the other spaces because there's no communication between the spaces.

R: Can you show me how and where?

P4: The spectator from the outside only sees the linear shape of the building, but the user sees that and also its insides, and understands that the spaces are also subdivided without any visual connections between them.

R: Can you remind again why one surface is shaping the form, function and circulations?

P4: It's related to what I mentioned about the diegesis being dependent and independent of the narrative, as I wanted something that can relate to both. Like here for example, it defines spaces and zones, and also functions.

R: Ok, so this single element (the form generating surface) is architecturally defining the spaces and the spatial organization, but how does it define the functions then?

P4: It defines them by becoming furniture and opening up for natural lighting for example in some places.

R: But what's the relation to the film?

P4: I considered them (furniture and lighting) to represent the im-signs, the characters, etc.

R: But you cut through the building, the surface to get to have your lighting slits.

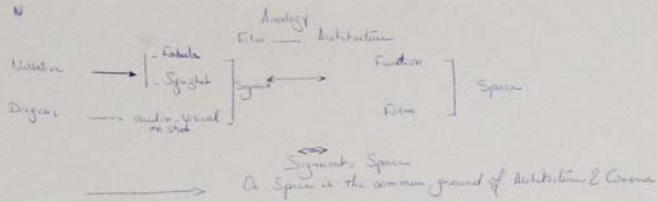
P4: Yes, but it doesn't necessarily have to go all the way, maybe just a groove in the ceiling.

R: Concerning the furniture, it's interesting and good that you related them the im-signs. However, by cutting this element that is related to the diegesis in order to make the light slits, a

certain inconsistency comes up: you can't use the same element to represent both diegesis and im-signs. With the furniture it's ok, because they are smaller elements in the space, not interfering with the structure but still generating clear functions.

End of Presentation

FILM



Case of Russian Ark: the Segment
fragmented narrative but continuous dialogue

fragmented function but continuous form

Russian Ark is already the smallest unit of the film chain = autonomous shot segment
= autonomous space
= continuous dialogue = continuous form

How to define syntagmas?

Basic Functions

"2nd Space"

Character Space limit,
lighting...

How to define the Space?

Analogy

"2nd Space" = "Space-Signs"

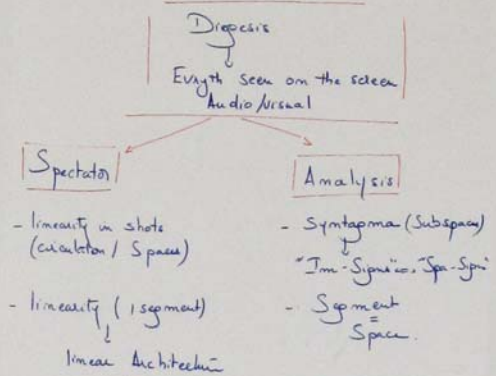
Space Signs

function, light, Position, height...

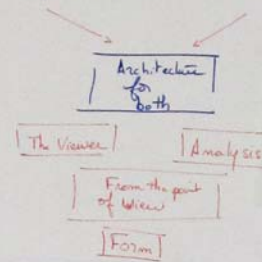
On Segment

E = S
NS NS

Space
function, height, Position...



ANALOGY
FILM & ARCHITECTURE



ANALOGY
SPECTATOR & VIEWER

ARCHITECTURE

R.A.

- 1 linear Diegesis
- Divided Narrative
- syntagma
- "Im-Signs"
- No Communication between Spaces

F.T.

- 1 linear form
- Divided functions
- Subspaces
- "Spa-Signs"
- No Communication between Spaces

→ Shape/Form

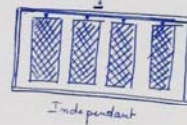


→ Function Subdivided



"Diegesis" part of the narrative but at the same time independent from the narrative

How would shape be part of the function yet independent?



Why wouldn't shape be a form define the functions → structure

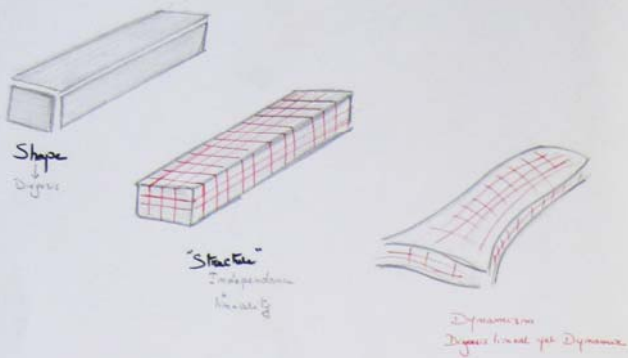


But Shape the most possible given to be → 1 segment

FORM & FUNCTION

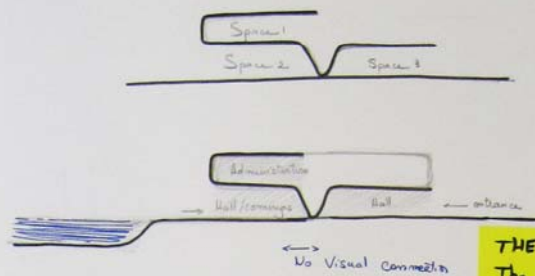
ANALOGY

Calvin Arab
Russian Ark
Ferry Terminal



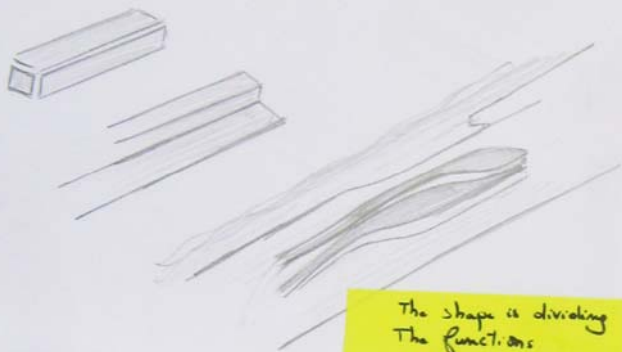
©

Dispersive ← narrative
Dependence/Independence



THE SHAPE is creating
The space and defining
them
(THE Important thing is
not to have a visual
connection between Functions)

From Shape to function



The shape is dividing
The functions
(fragmented functions)

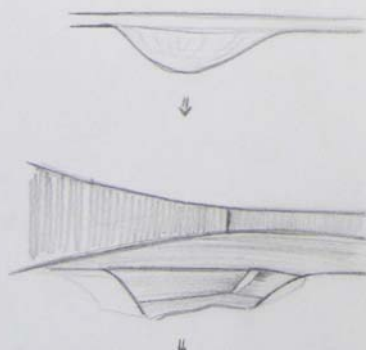
Different Access



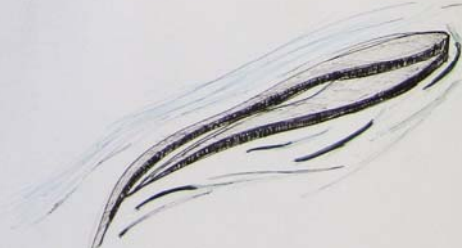
subspace divided
by (SPA-SIGNS)



INDEPENDENT ENTRIES
⇒ INDEPENDENCE
OF FUNCTIONS



THE SHAPE DEFINING
THE FUNCTION AND
THE NEGATIVE
FUNCTION = CIRCULATION



RESULT:
LINEAR
DIVIDED
ARCHITECTURE

Carline Leach
Ferry Terminal
Russian Ark

PARTICIPANT 5: SC – SHOPPING MALL

VIDEO FILE: DAY-5-4-DESIGN PRESENTATIONS.M4V

TIME: 01:01:30-01:15:18

P5: (PAGE 1 OF PRESENTATION SHEETS) I won't repeat everything my colleagues already said before, but I'll just mention that we have 9 families, and each of them is a NE, and the film's composed of multiple NS.

What I tried to translate into my architecture was what I understood from it, and what the viewer would imagine. What we notice during the film is that some of the NE are related to each other while others are not – just coincidentally visually appearing together in the same segment – and they are also related in a way that we make comparisons between the different families, thus we group them in way together, and thinking, for example, “there's a lack of affection in this family” and “another thing in that family”.

The events of the film are also taking place in practically the same setting or zone – a summary of the film says that it takes place in Los Angeles – and so I also considered that the film is like a path that starts from a point in time, t_0 to another point where $t=x$, and passing through this whole zone telling one or more stories.

We (the analysis group) also focused on the same 30mins section of the film that R used in his analytical work, and with the 22 NS of that section we found 3 themes common to the NE. The themes are

A: Suicide or Death – where in one NE fishermen find a floating female corpse, and in another NE, the cellist female character is thinking and trying to commit suicide.

B: Infidelity – recurring in many NE.

C: The hospitalized child .

I tried to put these themes together and see how they are functioning together. What I noticed is that in the first minutes, 4-5 NS with the same theme appear, followed by a NS with theme C, followed by many NS from theme B and infidelity, then theme C again. After this section where many themes passed, NS appear from theme A then from B, and the again C. If I deepen my analysis, it appears that the NS from C appear for longer times and more frequently. I represented this in this “heartbeat” diagram inspired by a cardiograph – since the boy's in the hospital – and it looked similar to one of a dying person where the heart beats almost normally first, then with higher rhythm and frequency, until it flattens at the end. So I represented them this way, since the kid is dying, but also because the NS become denser and more frequent.

And it seemed that each family/character of a NE is taking something from one NE and giving it to another – like love, affection, etc., like Gene (from NE_s) the policeman takes love and affection from another family (NE_{We}), although his own family needs it from him – so I considered that if there were 2 entities, there's a sort of interaction between them. In addition to these interactions, there are also, as said before, the iconic, thematic, verbal, auditory interactions, I tried to use them in architecture, for example how would I interpret an auditory connection? through a mezzanine for example, that can have an auditory connection, or visual or spatial one with another space.

After this, while watching the film, the question “what if?” kept recurring in my head, “what if this scene was done in a different?”, “what if this hadn't happened?”, so I had the impression that the film had a lot of chaos in it especially with the jumping segments. The way I tried to interpret this into the Mall then is by considering that the film, which is a chaos, is passing through from t_0 to t_x – t_0 being a stable state and at the end with the earthquake also – while in the meantime, the imaginary of the viewer is actually the opposite of this, as it tries to find clearer more “perfect” answers to how events are unfolding in the segments. So on the plot, the

chaos sinks down in the ground and towards the sea, while its total opposite, the perfection which is the imaginary aspect goes up rising above the ground.

So I considered the connections that R defined in his analysis as the chaotic elements and insert them in my architecture in the form of the voids here, and on the other hand, since the imaginary is the opposite of the chaos, then it's also represented by the opposite of the voids.

If I interpret them now in a Shopping Mall, the chaos wouldn't allow us to see much in it, or understand its organization, just like a "souk", on the other hand with the additional layer of the imaginary, the circulation the mall becomes more of an open air gallery with a clear general view on the whole system and each object.

I also had the idea to add a couple of additional functions to the conventional functions of a shopping mall, representing for example the "need and search for affection" idea I mentioned earlier, in the form of a medical center for example.

In section here, the void going down below ground level, defines then the chaotic part, and above it the slab represents the imagination of the viewer. And while going up from below we notice that the buildings surrounding the mall start interacting with it by means of continuation of the urban streets and openings and also becoming part of it – representing the "giving and taking of affection" idea.

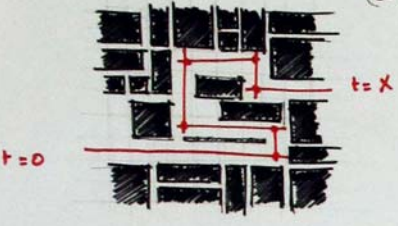
R: So the mall is the underground section only?

P5: The underground section is the all-public souk market, and the cover/slab is more of a multipurpose open area.

End of Presentation

I considered this film, a recording of 9 family
leaves, living in the same neighbourhood (since
all these families have met, ~~at~~; even in the
baker's place).

→ A camera using a path in this neighbourhood
from time $t=0$ (film starts) to $t=X$ (film
ends + earthquake)

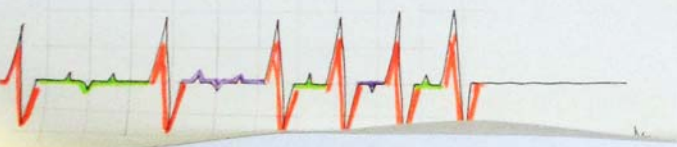


SC is dot the space between those connections.

Short cuts, is all the missed
connections.
It's about the space between
decisions.
The viewer is left to make
connections.

While watching
the movie
the viewer is
left to ask
about probabilities:
• What if that
didn't happen...

(Prob.)



In those 30 minutes, I figured out 3 main
themes in the 22 Narrative segments:

- Suicide and Death.
- Infidelity.
- Hospital sickness + Casey's prob.

- I decided to analyse the Rhythm of these 3 Themes.

First of all, I found different Ns having the
same theme.

Then, a brief Ns in the hospital -

After, passed different Ns having as theme.

Then, a brief Ns.

and, after that, I found that the (C) Ns began to
pass after each (A) or (B) Ns.

So: as diagram:



Until Earthquake

I considered each family an entity.
An entity that gives outcome.

- Almost every entity needs something from
another entity -

SE: Police man who ~~gave~~ from the other woman
who girl needed affection (Casey and his parents).

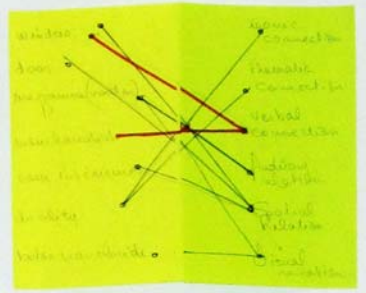
- So let's consider:

Each Entity → One Volume (Space)

Entity → 1
or
2 function (type).



each Entity interact with
another Entity.

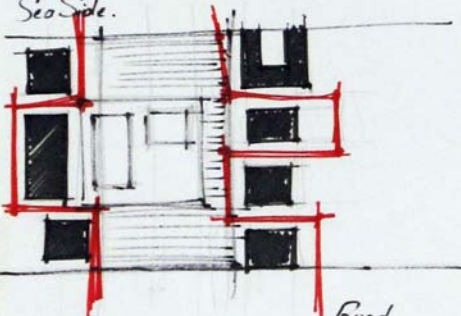


About the entities:

- 1 Honey & Bill Rosh.
- 2 Anne, Howard & Casey Fennigan.
- 3 Claire & Stewart Kane.
- 4 Louis and Jay Kaiser & children.
- 5 Joren and Earl Piggot.
- 6 Sherry & Jane Shepard.
- 7 Tess & Zoe.
- 8 Stormy Weather & Betty.
- 9 Wyman Dr Ralph & Hanson.

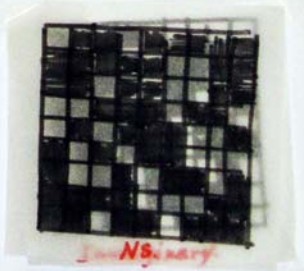
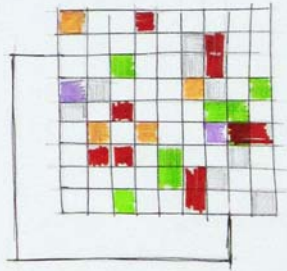
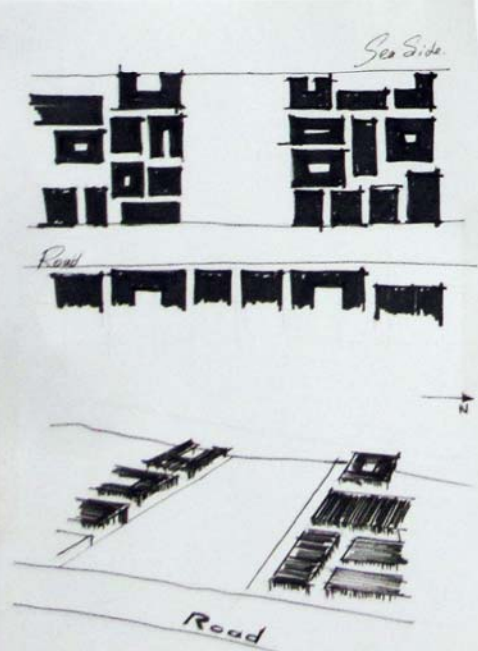
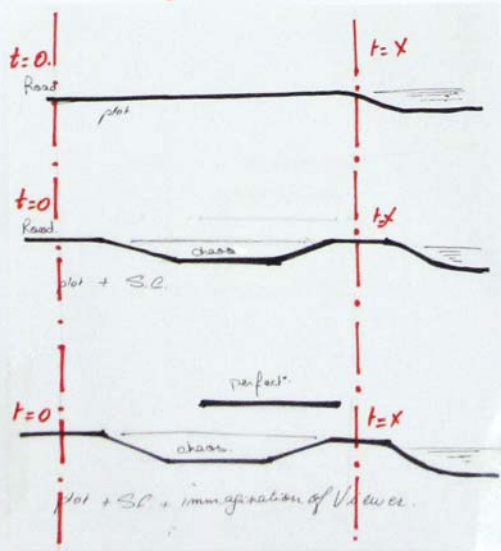
Plaster calls
The limo driver
enters the house.
Mother stays
in the house
hospital + Casey.
I was to say
If I want to
and I don't
penny.

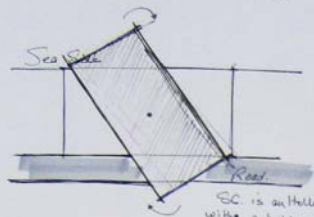
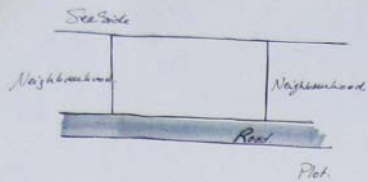
Sea Side.



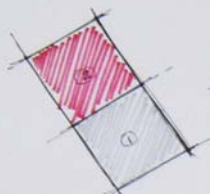
Road.

Interaction between Mall
and Neighbourhood

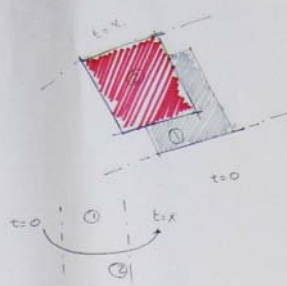




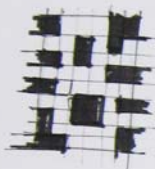
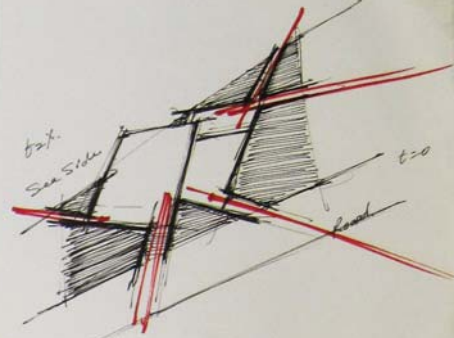
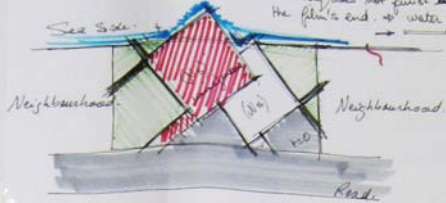
SC is an Hollywood film with a twist - Narrative.



SC for me was the film + the viewer's imagination.



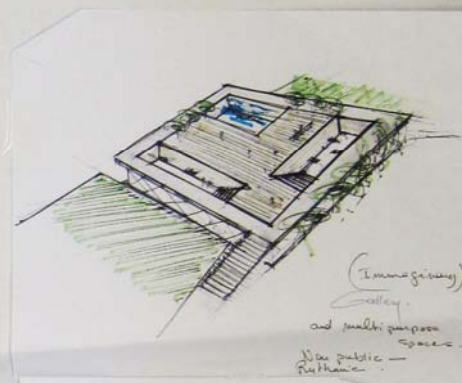
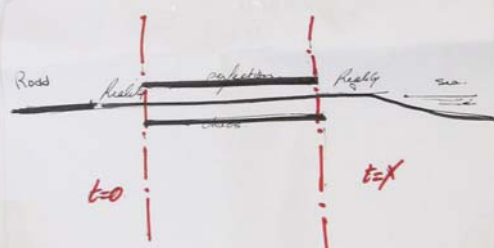
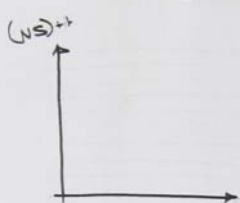
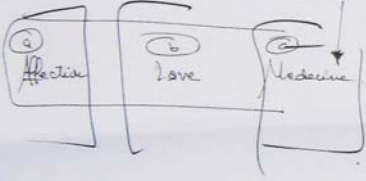
Despite the film is over, the story of the 3 entities does not finish with the film's end. + water



Shopping Mall:

- Shop (s)
- Rest (s)
- Multi purpose Space (s)
- Rooms (s)

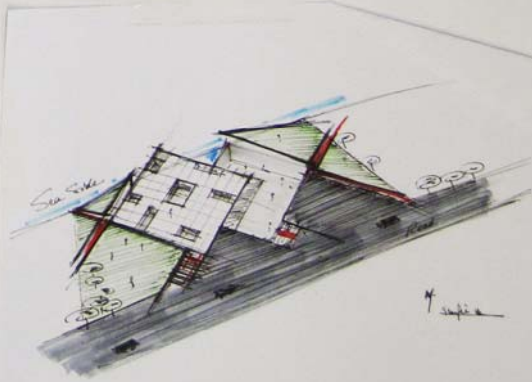
New functions from SC



Plot + Film + Imaginary

72 Minutes (NS) - Plot + Film + Imaginary

M. - Matta Torric - Short Cut - Shopping Mall - ca. 12th of March 2011



Public Space - "Chaos" - film

PARTICIPANT 6: SC – CULTURAL CENTER

VIDEO FILE: DAY-5-4-DESIGN PRESENTATIONS.M4V

TIME: 00:50:02-01:00:00

P6: (PAGE 1 OF PRESENTATION SHEETS) We started our analysis by looking at the film in general with all its 9 entities, and where each entity has its own story, space, characters, etc. First we take notice that the NE (Narrative Entities) are composed of NS (Narrative Segments) that when put together form the specific stories of the entities. We sometimes have direct relations between NE, when for example the corresponding characters are either neighbors or siblings, and the relation is then direct through the narrative or space. And sometimes the relations are indirect, when for example the characters meet by coincidence – like when one character of a NE hits the character of another NE in a car accident.

In the beginning of the film, we see helicopters passing over a city, and we see the characters reacting to it, leading us to understand that all the characters and the NE live in close proximity to each other, like in the same neighborhood or city; and also in the end, an earthquake occurs affecting all the characters of all the NE, confirming that the characters are spatially close to each other. So this lets us assume that the beginning and the end are similar, and between them are the NS that tell the stories of the NE.

We understand that in the totality of the movie and in due time, the connections between the NE start appearing little by little – like when we suddenly discover that some characters are sisters, or one is the daughter of another – and also the proper story of each NE.

So what I did for the functions of my architecture is to originate them from the movie, and be inspired by each NE, like for example taking the theme of music in one of the NE where the mother and her daughter are musicians, so this gives me the conservatory and the mediatheque. Then the NE with the fishermen and the river, becomes an underground aquarium area, and aquatic museum; the 2 NE with a make-up artist (for movies) and a painter, gives me the art ateliers, a cinema and a theater; and finally, all the segments with events that take place in homes, or houses, gives me more intimate spaces, like dormitory style rooms, and a library.

I also considered that each NE is equal to a function, and since they are subdivided into NS, then these segments make up the spaces. The circulation in each function is linear because the chain of events progresses linearly in each NE, but on the other hand, the circulation linking the different spaces with each other is chaotic, because of the erratic jumps between segments and entities.

So, the fragmentation of the film gives me multiple spaces having visual, thematic, etc. connections with each other.

Sometimes, the entities have endings and sometimes not. Moreover, each entity has its zone of influence where it sometimes affects the ones around it, intersecting with them, and sometimes not.

So in my architecture, taking the rectangle of the site, I cut it down into 9 smaller entities, where some have openings towards the horizon of the sea, representing the open end stories, and some are well-defined and closed. We also have the common start, with the helicopters flying over, and then a void, which represents the earthquake, cuts it (the building). After the earthquake, some stories end (closed narratives) and some stories linger on with a clear ending (open narratives).

(Page 2) In section there's a similar approach to all the entities, where they all gathered in a large public hall, from which we go down to the cinema and the aquatic sections (aquarium/museum) – the cinema referring to the make-up artist and the aquarium to his wife – so these 2 (cinema and aquarium) will have direct relations, and these relations while being underground also take us to the existing sea. Sometimes there are tensions between spaces

which lead to openings to the horizon/sea, and they represent the murder in the last segments and how we couldn't find out what happened later.

The circulation in each entity is linear because the narratives are continuous, but the general circulation in the building is not identified, because of the segments jumping non-stop. We also have visual relations between the spaces where one could see the other from one space, while the other can't because of translucency; there are also spatial relations, with a common double-height void linking spaces to each other for example.

If we consider 2 entities and their influences for example, like the musicians and the arts and cinema (painter or the make-up artist), we see that they are not actually related in the film, but functionally have influences, and these influences are represented by external landscaping where painting exhibitions are held simultaneously with live music, resulting in the meeting of these 2 functions.

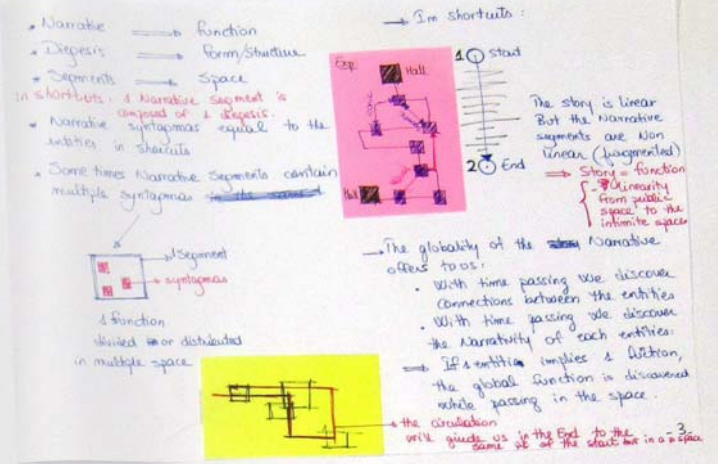
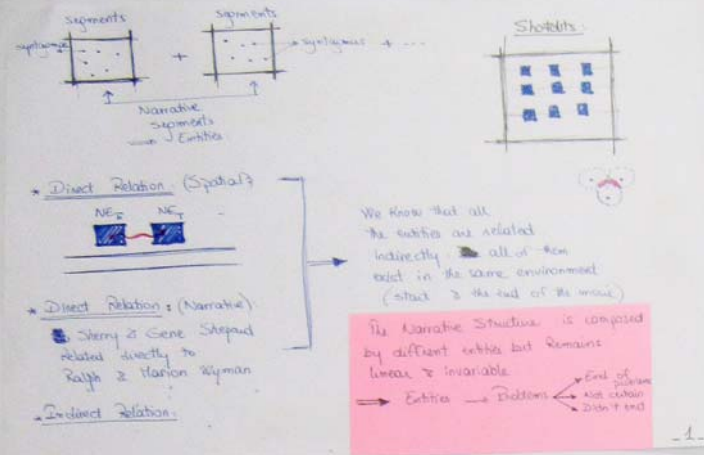
So I have multiple volumes sown together to form a single general entity. And in cases such as the painter and her sister (from a different NE) where they are strongly related, I may have 2 volumes under a same common roof, or in other cases with direct relations, the spaces become related to each other via visual, or thematic connections.

R: Very good. It was interesting how you added the functions by inspiration from the film, and referring to it. A remark though, when you say that the NE are linear themselves, I tend to disagree, because it's the NE themselves that are fragmented and distributed in small segments; the general film is a linear one, since it has a clear beginning and an ending, on the other hand, the NE are the ones being discontinued with disruptions to their flows.

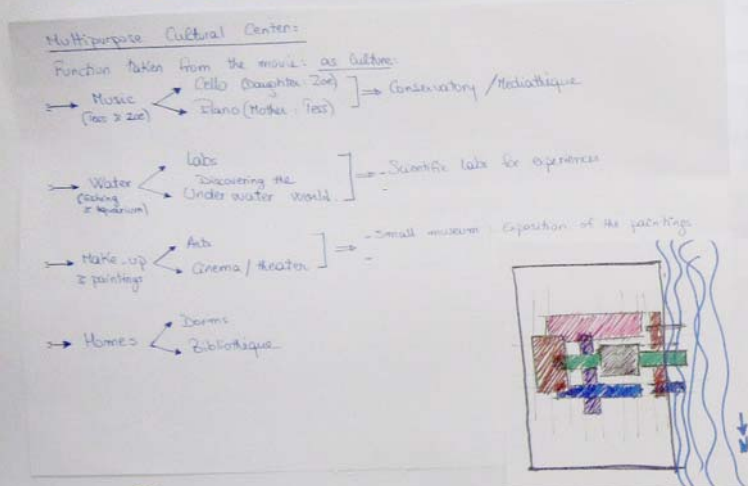
End of Presentation

Multipurpose Cultural Center - Shortcuts

1. Brief Analyse of the Movie:



2. Functions taken from the Movie:



Each Entity = Function.

Composed of Many Narrative Segments.

The Circulation in the Same Function is (Linear in general): The Narrativity is linear through the time.

The Narrative Segments between the entities is Not Linear

The circulation between the entities is Chaotic



2 types of circulation:

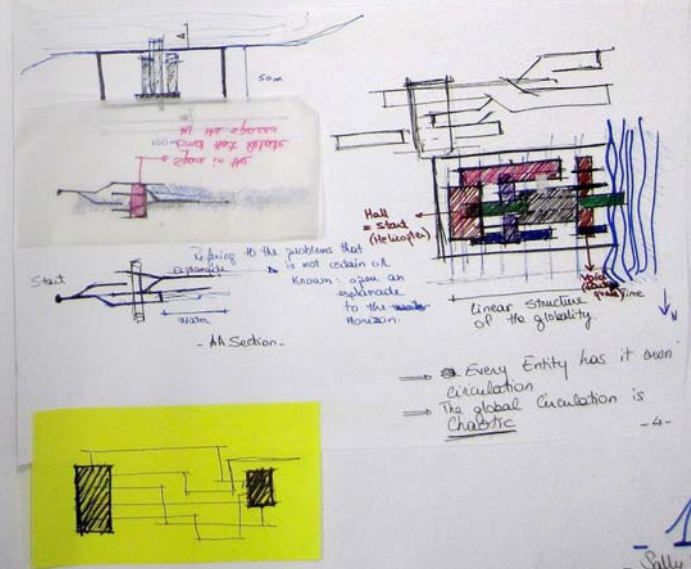
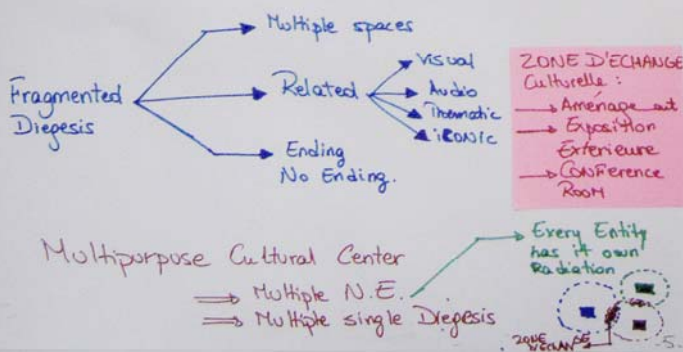
2 types of problems:

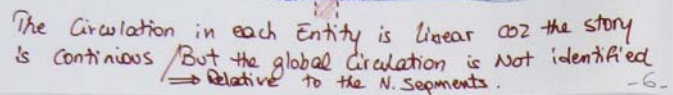
Death

Infidelity

Simultaneous

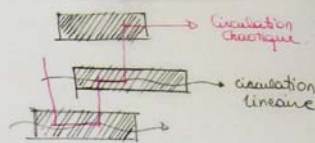
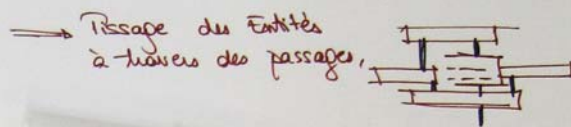
3. Translating the Movie to An Architecture: Cultural Center.





Directly Related such as the sisters.
The Level 0 connects the 2 entities:
The void offers visual, Auditory & spatial connections.

But
If the Entity is independent & have connections with the others, its defined by its own space & form (Volume independent, passerelle, transparence)



- Aquatic functions
- Mediathèque
- Bibliothèque
- Arts & cinema
- Conservatoire
- Labs for water experience

PARTICIPANT 7: SC – RESIDENTIAL COMPLEX

VIDEO FILE: DAY-5-3-MIREILLE.M4V

TIME: 00:01:40-01:15:48

P7: (PAGE 1 OF PRESENTATION SHEETS) Everything I'll start saying now is the strategy of my thoughts, of how I worked on the architecture, even though I didn't complete the design itself, but what I want to talk about is the logic I followed to reach there through the analysis we heard from Richard, and the analysis we conducted ourselves in our group (Group SC).

So the strategy in short, in relation to all the theory we previously saw, and in relation of SC the film that our was working on; I started with the narrative structure of the film and syntagmas that through shots, camera movements give us sequences that are specified by the persons, stories and events in this film, and then the union of segments gives us specific entities, and in total we have 9 entities, that themselves build the complete story of the film itself. And if we take the parallel of architectural structure, where the syntagma is the architectural objects and are limiting the segments, spaces in architecture, so my topic is "Residential Complex" where the spaces are made of units, and residential bloc gives functions which in turn are the 9 entities...

R: Excuse me, could you please repeat that last idea?

P7: Ok, so I'm in parallels: syntagma gives us objects, elements, architectural elements and objects; which are different syntagmas, and different architectural objects give us spaces, define spaces. And the spaces in my case are inside my residential units, and also every one of those spaces define the entities, and we have 9 entities, so which make consider that the primary functions are the residential complex and composed of each residential unit having different program and diagram, so we have 9 different residential units each having a specific strategy, program and diagram from the inside, each one has internal spaces that are defined by the architectural objects and elements.

Now if take the "story", we see how in SC the narrative story is fragmented, what is fragmented with, and the 9 entities that we say are the functions of the residential complex? It's fragmented by segments and the diegesis, segments are by spaces and forms. So if we say in conclusion, we fragmentation of the architecture by the functions, spaces and forms. So these are the main points that generally define my architecture, I mean that I'm depending on fragmentation, which defined through functions, spaces and forms.

So I will continue with the analysis that we (Group SC) had started, that while watching the film we were looking for any kind of links between these 9 stories. We saw that there is first of all a social link, where the subjects treated belong to social problems in life. And we specified 2 topics: Death – some stories revolve around death- and some stories have Infidelity, Jealousy, and that kind of stuff. So if I want to transform them into architecture, the fragmentation that's occurring in this story which contains, fragmentation, violence, crack, suspense, in this section, and the infidelity which I considered in this part like some disorder, chaos, mosaic; so there is a certain thing which is unclear, and we see in these groups and the chaos, you feel like being lost, and there's a lot of confusion. So I considered the terms of disorder, chaos, and mosaic. So the confusion is between the fragmentation and chaos, plus the order. The order for me is the link that connects each story. So I have this confusion between order, chaos and fragmentation.

In parallel, concerning the spatial structure, in our story we have 9 stories, and if we take each story in its own space, so these spaces are separated/scattered, and there's a link between them, and we just saw what they were in the film, but they are all of them defining one global space, where we see them all living in the same area, and where there are a lot of things that joins them because they are in Los Angeles, so all the space are located in one place. So I considered there are different spaces that are defining one global unit. And I remind you of the mosaic network, that works like a network, a technical network, and chaos and disorder.

(Page 2) And now what I started doing as architecture strategy. First of all, as I talk about the order which is the link that joins all the 9 stories, and resolves the problems, and which is time. Time that is linear in the film, and we see in each “time” what’s happening in each story. So this specific link is time and the problem, the social problem. That’s why I represented my “order” with a (Cartesian) system; this system defines the 9 stories, and this global space that I mentioned, I considered it as a cube organized/subdivided by this system. For the fragmentation, the system starts moving and being deformed. And the fragmentation starts division and separation, which gives us this certain division. If we consider the section, and still staying in the idea of the system, I took one group of complex network that is defined by: first of all, I have 2 vertical blocks on both borders that serve as common spaces; so I have here 2 elements, why did I adopt them? Because in the film SC, we notice that there are 2 verticals, 2 tragedies, the first that is the helicopter passing over, and the second that is the earthquake, which unite all the stories. So we see here the 2 vertical links, one for vertical circulation and one for technical spaces and amenities, and I divided the entities into 9 linear entities. So here I have a vertical circulation, and a horizontal circulation where each entity is linear. So my entities are linear but they are being joined by something vertical. Second, I have an inter-web of structure that I subdivided; this structure defines links that are both visual and physical. Network and design explore a genetic approach, a complexity of living and social spaces, so this global is defining the complexity that the people inside are experiencing, just as the film shows us the complexity of different ways of living the same problem. So this is a complex that all the people are living in and we can see each one of them in residential way. As for the fragmentation by the structure, that I specified by the “oriental” and the vertical, we can see this metallic structure – where sometimes the structure is very condensed in some places – which defines the complexity, and provides an optical illusion because sometimes there are things in the film that are not well-understood; so in some places the structure is very dense which doesn’t allow us to see on the inside – from far outside it looks opaque, but by coming closer it becomes clearer – so this illusion in the façade, or the strategy, wherever I want to imply curiosity I implement this density of structure, and here it is this that provides the curiosity that depends on the optical illusion.

The second fragmentation that I considered, is the violence and crack, is an oblique; over there I considered it horizontal and vertical, and here I take it as an oblique. So the superposition of both systems is what creates either interior volumes or – where violence is defined here in every entity, and every entity that revolves around death, so I represent them in the façade. So we look at the façade first and we see the different volumes that through 2 systems define the curiosity, the illusion or the unclear things. Here we see that through this double layer – as I said this metallic structure – and the sequence-spaces where each floor is an entity; sequences, that if we consider this entity and the sequences in it, if it gets closer it creates an intimate space in it: if I say that the details are the codes, plus the events and the ambiance are the ones that specify the sequence, like here a bedroom for example; so all the elements mentioned before about the syntagmas, are defining the spaces here for example. And here between these elements we have again all the auditory, visual and spatial relations; the same goes for the plan also: each entity I considered is linear – but where the circulation is not necessarily linear – but the spaces that I have, some of them are in contact/relation with the ones next to them, or also, the sequence that is the space becomes common with the other space in an other entity.

So this is the superposition that I tried working on as a strategy, of course I didn’t complete yet because I still have the superposition of these 2 systems that should define a composition that is in direct relation to the film in a more specific way. So this is what achieved for now, the strategy of my approach, disregarding the design.

R: J do you have any questions?

J: So this is a building with multiple apartments?

P7: It's a group of 9 residential units. Each residential unit is on one floor. And each unit is made of many spaces. Since I have 9 units, each has different programs, or functional diagrams inside, and at the same time they have internal links, but from the outside we can't know what those links are.

J: Exactly, that's what I want to find out about because in the film there are many kinds of "links".

P7: Yes, from the outside we don't see the interior; all we see is a complex, a network, a façade that sometimes gives us curiosity, an optical illusion, as I said, from far we don't see much but that it's only opaque with a metal lattice. But when enter, the links, depending on the links in the film, are either physical, for example a common space that connects together – a void that connects 2-3 different linked apartments – or visual, like a visual relaxation space, or auditory, like for example, the sound of running water, being heard from different apartments. So, all these links are only on the inside of the building, while from the outside we can't distinguish them.

R: How did you decide which spaces have visual, auditory or physical links? And how to group them?

P7: Here I only give a brief example. I didn't have the time to go into the details of making the connections between these spaces and the film. These are still general ideas, without concretization. But if I would manage to take a sequence for example, I would apply its properties in the intimate spaces here, and explain the choices better.

R: So that would allow you to decide also to give a bedroom some visual links with other apartments for example...? But I didn't understand yet why this external metal frame where from outside it provides only visual illusions, and see just boxes?

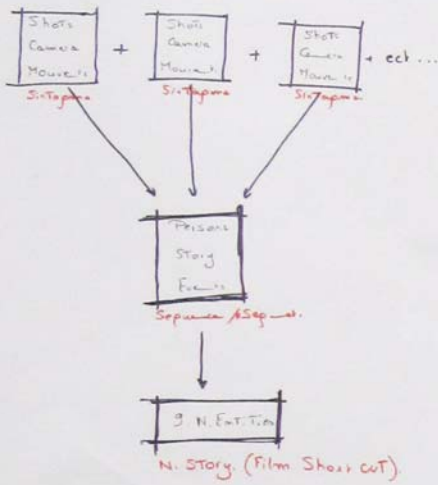
P7: When I talked about the horizontal and vertical fragmentation, I was referring to the unknown aspects of the film, the parts where we don't have finished answers to, or even the curiosity that the film instills in us; and this detail is what becomes the metal lattice of the building's façade. So that's why in some parts it becomes condensed, and in some other parts less dense allowing us to see more of the blocks, the spaces from the outside.

R: So this is also related to those narrative entities in the film that reach a certain closure and those that don't?

P7: Yes, that's correct, and also how some stories in the film have some gaps in them that are not necessarily in the end part; but I didn't make the distinction them all, I just specified this in a global way.

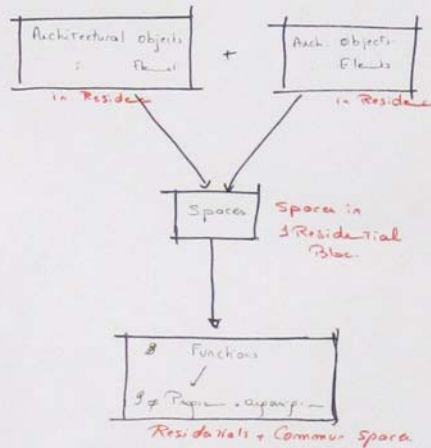
End of Presentation

Narrative Structure



Short Cut.

Architecture Structure



Residential Complex

STORY

FRAGMENTATION OF 9. N. ENTITIES.

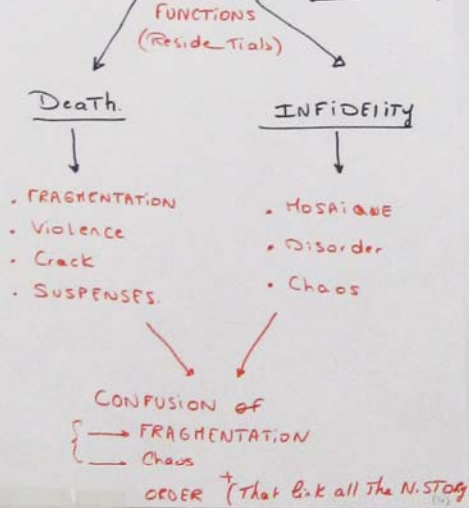
FRAGMENTATION OF FUNCTIONS.

FRAGMENTATION OF

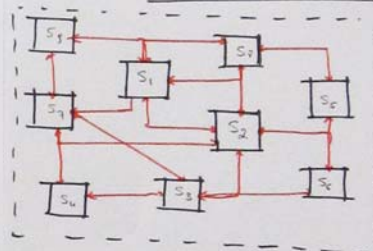
- SEGMENTS → SPACES
- DIFGES → FORMS.

⇒ A FRAGMENTED Architecture By its FUNCTION / SPACES / FORMS

* FRAGMENTATION OF THE 9 N. ENTITIES / SOCIAL PROBLEMS



SPATIAL STRUCTURE



DIFFERENT SPATIAL DEFINE 1 NETWORK SITE ⇒ 1 GLOBAL SPACE (L.A. in film)

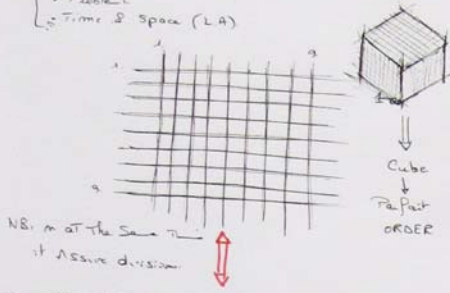
- MOSAIC NETWORK
- Chaos
- Disorder.

Michelle younes
Short CUT
Residential
Complex

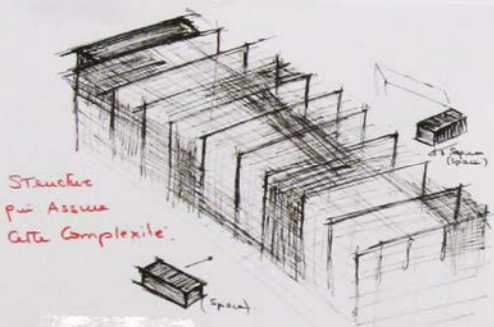
1. ORDER.

TRAME : 9 UNITS.

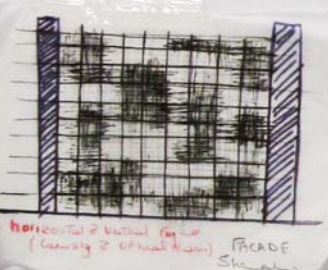
The link Between the 9. F. S. T. :
 - Problem
 - Time & Space (L.A.)



2. FRAGMENTATION : Divisions / Separations.

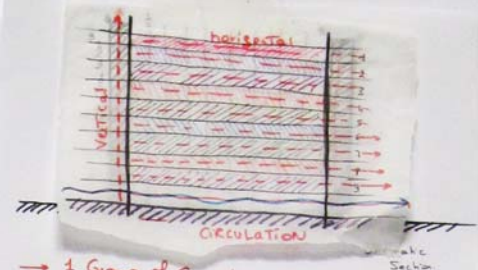
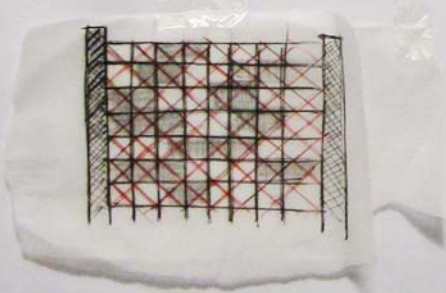


Structure
 qui Assure
 cette Complexité.



(Resille Metallique)
 in Structure
 give us
 the figure
 of the Block
 depend.
 on the Illusion
 Optical
 Illusion.

Hysteresis
 Consistency
 from distance we cannot see
 what is behind. But when we
 get closer to the FACADE I can see



→ 1 Group of Complex Network
 which is defined
 by:

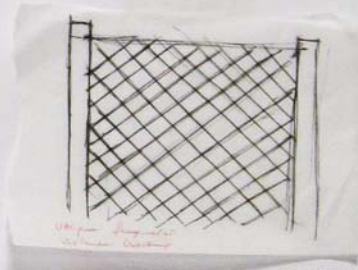
- 1. 2 Verticals Blows on Both Border
 Severs as Common Space.
 a. Circulations (vertical)
 b. Technical & Service Function
- 2. Intervall of Structure Providing an array
 of Port → Physical & first
 → visual
- 3. Network where the design explore a
 Dramatic approach
 - Complexity of living → Social-Space.

→ FRAGMENTATION : Disorder
 Chaos
 Mosaïque

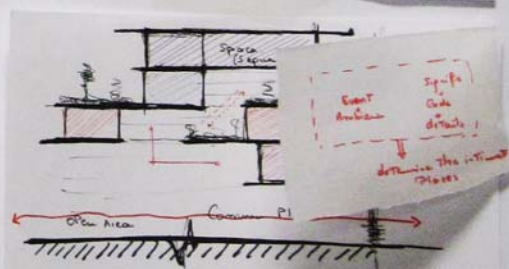
Trame Horizontale
 Verticale

→ FRAGMENTATION : Violence Sign
 Crack.

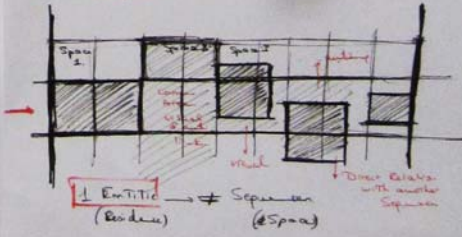
TRAME Oblique



don't effect the
 Spaces inside.



Sequence Link
 - Auditory
 - Visual
 - Spatial



• MiReille
 • Short
 • Resid
 Con

PARTICIPANT 8: SC – FERRY TERMINAL

EMAILED DESCRIPTION OF DESIGN PROCESS

1. 9 entities start from the same point.
 2. Some are linked together in different ways; stories are not limited with an end others have a specific end.
 3. The relations between entities are chaos.
 4. Spatial and visual connections
 5. I divided the different stories of different entities in four types
- 1 start, 1 end, e.g.: NE_s
 - 2 linked starts, 1 end, e.g.: NE_{Wy} + NE_{Kn}
 - 1 start, no end, obscure, e.g.: NE_{We}
 - 2 linked starts, no end, obscure, e.g.: NE_{Ks} and NE_B

In architecture I transferred each of this data to a functional architecture that serves my project (ferry terminal)

1. All the functions start from the center point located in the middle of the project (start point)
 2. Spatial & visual concept in architecture
 3. The design is chaotic
 4. The project is composed of different functions designed by the concept of each type of the entities stories
- 1 start, 1 end = elevators, emergency stairs
 - 2 linked starts, 1 end = internal pedestrian ramp (start from the center by 2 point left and right and finish at the top), main glass volume
 - 1 start, no end = the ships' decks (start from the center point and end up in the sea) (obscure)
 - 2 linked starts, no end = the external ramp that has two ways & ends up in the sky (obscure)

Like in the movies we have for each category the same number of functions.

The vertical structure & the small glass room boxes form the connections between the entities.

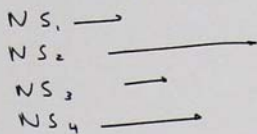
The design is linear & chaotic.

End of Presentation

SHORT CUTS FERRY TERMINAL

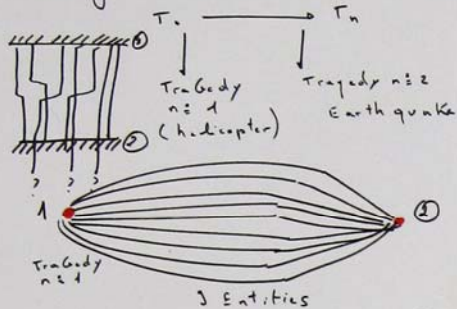
Narrative Segments: **Non Linear**

T₁ T₂ T₃ ... T_n



Narrative: **Linear**

Timing



Narrative Structure:

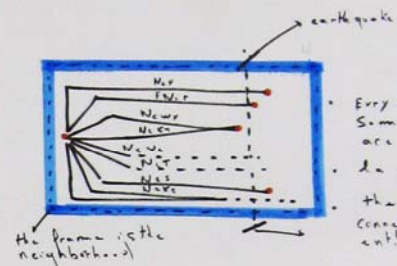
- Every entity is a function. Some have an end and some are obscure.
- the time is linear

- All the stories start from a point and the earthquake is a connection between all the entities

- there is connections between entities in problems like (Death, infidelity)

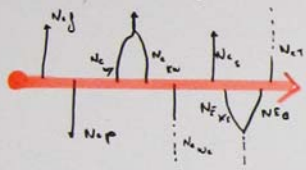
Architectural Structure:

- Administration
- Deck (ships)
- Hall
- Axes
- Parking

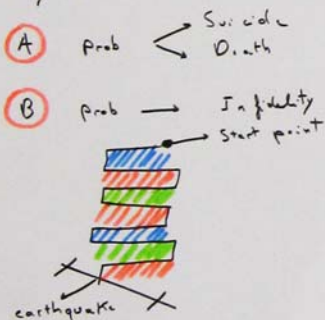


- Every entity is a function. Some have an end and some are obscure.
- the earthquake is a connection between all the entities

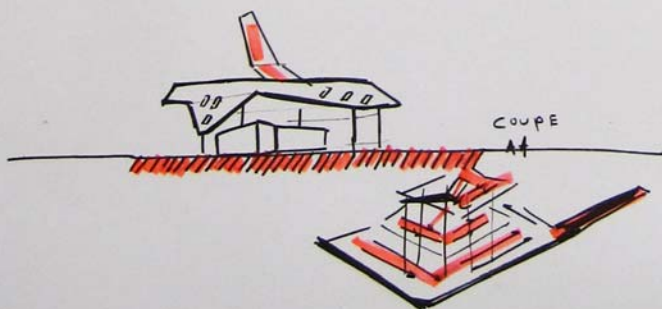
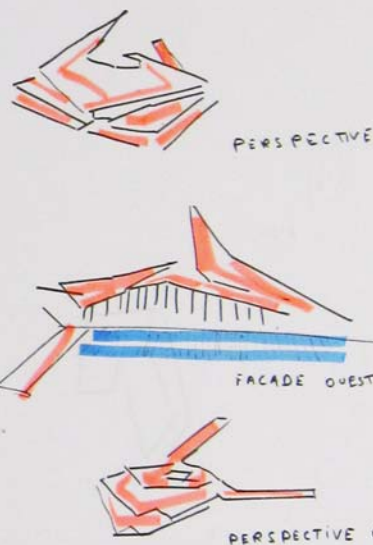
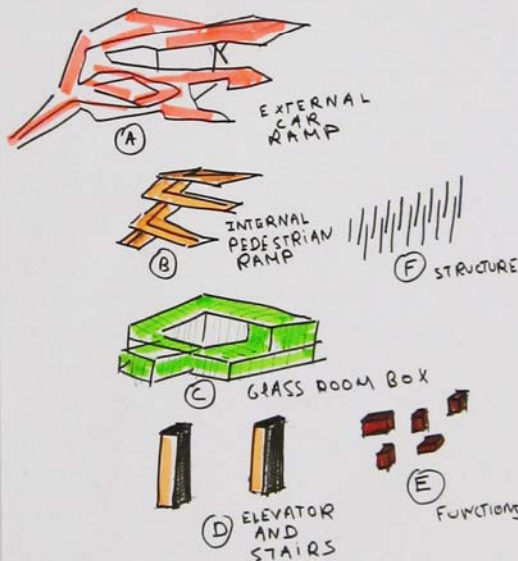
Social Networking Site:



There is 2 kind of social problem in every entity:



MODEL SCHEME



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GLOSSARY

α : Spatial Velocity of *Russian Ark*

AFU: Art Factory Unit

CF: Camera-Figure

Diegesis: “the film’s *represented* instance, that is to say, the sum of a film’s denotation: the narration itself, but also the fictional space and time dimensions implied in and by the narrative, and consequently the characters, the landscapes, the events, and other narrative elements, in so far as they are considered in their denoted aspect” Christian Metz

DPG: Diegetic Progression Graph

Ds: Diegetic Spatial Structure

E: the group of all spaces that contain Σ

ϵ : the group of all spaces that contain δ

Events: the causal actions and happenings that place, put into relation, affect the Existents and/or are generated or caused by them

Existents: the characters in addition to every element that constitutes the setting (the diegetic environment) they inhabit

FA: Functional Aggregate(s)

FAADD: Film-Architecture Analogy Derivation Diagram

Fabula: the basic outline or raw material of the Story

FS: Functional Space (in Architecture)

FSP: Film-Specific Property(s)

G: Group of Σ that represent the same historical period

HSUK: Holy Spirit University of Kaslik

IDDD: Individual Design Derivation Diagram(s)

IDSD: Individual Design Sequencing Diagram(s)

Im-signs: any and all real world elements represented in film and on-screen

ISC: Inter-Segmental Connection(s)

ISpC: Inter-Spatial Connection(s)

ISR: Intra-Segmental Relation(s)

ISpR: Intra-Spatial Relation(s)

LSTT: Layered Segmental Time-Track

Narrative: the recounting of two or more events (or a situation or an event) that are logically connected, occur over time, and are linked by a consistent subject into a whole.

NE: Narrative Entity or Entities

NNS: Non-Narrative Segment(s)

NS: Narrative Segment(s)

NTD: Narrative Time Digraph

Optical Devices: series of optical signs used during the editing phase of filmmaking: fade to black, dissolve, fade-out, etc.

PL: Physical Limits of NS

Plot: the rearrangement of the basic elements of the Fabula

RA: *Russian Ark*

SC: *Short Cuts*

Segments: blocks of Syntagmas that are joined together containing information relevant to the understanding of the narrative of the film in total

Shot: a continuous flow of images uninterrupted by editing and not constrained to any specific duration

SSL: Structuralist Semio-Linguistics

STT: Segmental Time-Track

Syntagmas: groupings of one or more shots with or without optical devices, with or without camera movements

TDDD: Total Design Derivation Diagram

TJ: Time Jump

TSP: Topic-Specific Property(s)

Σ: Narrative Syntagma(s)

δ: Non-narrative syntagma(s)

VL: Visual Limits of NS